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Edited by MARSHALL D. KETCHUM *and* J. FRED WESTON
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THE MANAGEMENT OF THE PUBLIC DEBT*

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THE PROBLEMS INVOLVED IN DEBT MANAGEMENT

In consequence of heavy borrowing requirements, the federal debt during the war period increased by 219 billion dollars, reaching a peak of 280 billion dollars in February, 1946. The problems connected with borrowing these funds, difficult as they proved, were not nearly as complex as those involved in managing the debt thus created. Not only is the debt, in absolute amount, and in relation to national income, larger than ever before, but its influence upon economic behavior has become immensely more complicated.

Debt management is not a subject which can be defined and discussed neatly within a simple analytical framework. The theoretical aspects of debt management cut across the fields of taxation, money, credit, prices, interest rates, and capital formation. In practice, the manner in which the debt is managed has a direct bearing upon income distribution, changes in the volume of bank deposits, and day-to-day conditions in the money market.

In view of the complex nature of the subject, it is not surprising that widespread disagreement exists with regard to the objectives of debt management and the appropriate policies which should be followed to achieve these aims.

Although I do not have space in this paper to consider all phases of debt management, I should like touch upon six of the more important problems. These are the problems of debt reduction, the term structure of the debt, ownership distribution, the interest rate structure, credit control in relation to debt management and, finally, the administrative problems arising from the present division of responsibility among different government authorities.

THE PROBLEM OF DEBT REDUCTION

Since the end of the war our total federal debt has been reduced from the peak of 280 billion dollars, reached in February of 1946, to the present figure of 252 billion dollars. The bulk of the reduction, 22 billion dollars, was accomplished by drawing down the very large working balance which the Treasury had on hand after the successful flotation of the Victory Loan. The remainder, 6

*This article is based upon an address by Mr. Aldrich given at a joint luncheon session of the American Finance Association and American Economic Association in Cleveland, Ohio, on December 28, 1948, in connection with the annual meetings of these associations.

billion dollars, is attributable to the budgetary surplus. Although tax rates were in general maintained until 1948, this budgetary surplus was not the result of a course of procedure carefully mapped out in advance by our fiscal authorities. It resulted very largely from the high level of national income, caused in part by the commodity price inflation which has existed since the end of the war. In spite of the continuance of this high level of national income, the budgetary surplus is now disappearing under the combined influence of the 1948 tax reduction and increased expenditures.

Ideally, retirements of the public debt should take place in periods of high-level business activity, when they will tend to restrain total expenditures in the private sectors of the economy and to offset the possible inflationary effects of private credit expansion.[1] In periods of depression, it will be difficult, and may well be undesirable, to accomplish any reduction in debt. However, over the long run, debt reduction is essential to inspire confidence in the credit of the Government.[2]

Some students of the subject have attempted to set forth in mathematical terms the precise rate at which our debt should be reduced. One formula proposes that the debt be reduced at a constant annual rate; another, that debt reduction be proportioned to national income. In my opinion, it is impossible to devise any precise formula which should govern the rate of debt reduction. All that we can do is to be prepared to take the necessary budgetary action to retire in periods of prosperity the maximum amount of debt.

The Term Structure of the Marketable Debt

A second and immediate problem of debt management is the unbalanced term structure of our existing marketable debt. The marketable debt is characterized by a heavy concentration of short-term maturities and by an irregular maturity spacing of intermediate and long-term obligations. Thirty-one per cent, or 49 billion dolars, of the total outstanding marketable debt matures or is callable within one year. Sizable maturities, or call-date concentrations, occur in 1949, 1952, and in 1967. Unless maturity

[1]As long as the Federal Reserve System continues in a period of inflation to give support to the government securities market, it is imperative that the Treasury have a budgetary surplus which can be used to offset, at least in part, the monetary and credit effects of the support operations.

[2]The economic implications of debt retirement are given emphasis in the *Report of the Committee on National Debt and Taxation* (Colwyn Report), London: His Majesty's Stationery Office, 1927.

distribution is brought into better balance, the management of the debt will become increasingly difficult.

Since the end of the war, the Treasury has followed the policy of refunding the unredeemed portions of virtually all maturing issues into one-year obligations. During the past year, when the private demand for capital funds has been unusually strong, this policy may have been justified. However, if continued, this practice, together with the lapse of time, will result in a pronounced increase, both absolute and relative, in the short-term debt. Three years from now, if all options to call outstanding issues should be exercised on first call dates, the amount of government obligations due within one year will rise from about 49 to nearly 92 billion dollars.

In the postwar period, the Treasury has avoided a relative increase in the floating debt because it has been able to redeem large amounts of maturing marketable obligations. The funds for this purpose were derived initially from the proceeds of the Victory Loan and later from the cash surplus and the sale of savings bonds and other non-marketable debt. The proceeds of the Victory Loan have long since been used and, unfortunately, the cash surplus threatens to disappear. In view of this fact, the Treasury's current efforts to increase the sale of savings bonds are praiseworthy. The sale of savings bonds permits short-term marketable debt to be funded and placed with non-bank investors. However, over the next few years, the concentration of debt maturities, including the savings bonds sold during the war, is such that, unless present policy is changed, the short-term marketable debt will continue to increase. The Treasury, therefore, must give consideration to the effects of the continued refunding of maturing or called issues into short-term obligations.

A certain proportion of the debt must, of course, be of a short-term character. The Treasury must borrow to some extent on a short-term basis in order to equalize seasonal differences between operating cash receipts and expenditures and to avoid carrying unnecessarily large working balances. Short-term government obligations are also required to satisfy the liquidity requirements of commercial banks and other investors. The amount of short-term debt required for these different purposes, however, is far less than that presently outstanding.

Any structural rearrangement of the debt necessarily involves conflicts of interest. From the point of view of the Treasury, a

conflict arises between the advantage of deferring maturity dates as far as possible into the future and the resulting disadvantage of higher interest charges. From the point of view of investors, the advantage of a higher return on longer-term securities must be weighed against the risk of relatively wide fluctuations in market price.

The considerations I have already touched upon and those to which I shall later refer all lead to the conclusion that constructive policy requires that over the long run the term structure of the debt be lengthened. To carry out this process successfully will require important readjustments in the present structure and level of yields on government obligations. The determination of the interest rates which will best accomplish the necessary results will require from time to time the most careful consideration and reconsideration of the currently existing policies of the monetary authorities with regard to the maintenance of any particular level of prices for long-term government bonds.

The Ownership Distribution of the Debt

Closely allied to the problem of the term structure of the debt is the question of its ownership distribution. In the long run, the aim of debt management should be that of reducing the holdings of the debt by the commercial banking system and of promoting broad investor ownership. The principal holders of the public debt should be institutional investors, such as life insurance companies and savings banks, and individual investors. Business corporations, states, and municipalities cannot be expected to be net buyers of the debt, and future acquisitions by the agency and trust accounts of the government are contingent upon a variety of considerations. Widespread investor ownership means stable ownership. Sales or redemptions of government securities by one investor group are likely to be matched by the purchases of other groups.

The requirements of institutional and individual purchasers vary greatly, compounded as they are of such factors as liquidity, earning power, and safety. The present unbalanced maturity structure of the public debt makes it difficult for investors to adjust their own portfolios in accordance with basic planning. The debt structure provides for revolving maturities only in the case of Treasury bills and certificates of indebtedness. Overall maturity spacing, which would facilitate the investment operations of major debt

holders, is a means of achieving liquidity, irrespective of fluctuations in market price.

The Treasury, therefore, should endeavor to integrate the structure of the debt with the general pattern of institutional and private investment schedules and should plan to revolve the outstanding debt within this framework. Rates of interest and other terms, such as serial maturities, negotiability, and special redemption features, could then be designed to fit the needs of special classes of investors, so that to the greatest extent possible the debt will be held by institutional and private investors and not by the commercial banking system. Precautions must necessarily be taken against allowing the special tailoring process to confront the Treasury with redemptions on a scale which would undermine the established debt structure.

This type of reorganization in the debt structure cannot be achieved easily or quickly. It will take a long period of time, serious thought, and careful planning. A beginning should be made as soon as possible.

Interest Rate Structure

From what I have already stated I am sure that the reader will understand that I believe that the goal of the monetary authorities should be to modify the policy of maintaining rigid support levels for government bonds and to regain their freedom to determine from time to time what support, if any, is necessary to maintain an orderly market for federal securities. More than two and one-half years ago, I expressed this thought by stating that the Federal Reserve Banks should not feel themselves bound to maintain an artificial level and structure of interest rates.[3]

Since that time there has been considerable discussion concerning the desirability of pegging the prices of government obligations at present levels by the Federal Reserve System. The supporters of the existing policy declare that pegging operations are required to facilitate debt refinancing operations, to keep interest costs on the debt at a minimum, and to protect the economic system from the possible consequences of loss to the holders of marketable government obligations when the debt is so large and so much of it is held by lending institutions. They have asserted further that the abandonment of the existing pegs at the present time, in combination with other factors, might result in plunging our economy into

[3] *The Control of Inflation*, May 2, 1946.

a depression and in causing wholesale encashment of non-marketable redeemable obligations.

These arguments minimize the functional role of interest rates in our economy. A flexible short- and long-term interest rate policy is an important factor in a period of inflation to encourage personal savings, to discourage the liquidation of government securities by lending institutions, and to restrict excessive capital expenditures —in short, to control the volume and use of credit.

A flexible long-term interest rate policy will not, in my opinion, plunge our economy into depression nor provoke widespread redemption of savings bonds. Those who make the contrary assertions underestimate the basic strength of our economy and the willingness of the holders of the redemption issues to retain their obligations, many of which, with the passage of time, carry attractive yields to maturity.

It must always be remembered that the removal of existing rigid support prices, when undertaken, does not necessarily mean the abandonment of all intervention in the government securities market. Monetary and fiscal authorities should consider themselves free at any time to intervene in the market to maintain orderly conditions. They should, however, correct any misapprehension investors may have that the prices of government bonds will be supported indefinitely, either now or in the future, at any specific level.

Our monetary and fiscal authorities, too, have many means at their disposal to combat deflationary trends, if a recession should occur, before a situation develops which might lead to depression. We should take care not to have our psychological attitudes so conditioned by the events of the Great Depression that we are inhibited from making those constructive modifications in the interest rate structure which may be called for by future developments.

Concerning the idea that some sort of a commitment has been made by our monetary authorities, it is sufficient to point out that the authorities have no statutory power to make a contractual commitment to maintain the prices of marketable bonds at par. Those who declare that such a "commitment" has been given base their belief on current policy declarations of the Federal Open Market Committee and on qualified and often ambiguous state-

ments of various government officials. These declarations and statements obviously cannot constitute a "commitment."

THE PROBLEM OF CREDIT CONTROL

The public debt underlies such a large part of the monetary and credit structure of the country that its management cannot be separated from the general problem of monetary and credit control. This circumstance makes essential a co-ordination of Treasury and Federal Reserve policy. The co-ordination should not be brought about, however, by the dominance of the one party or the other, but by a joint development of fiscal and monetary policy directed towards the long-run advantage of the economy.

Purchases of government securities by the Reserve Banks have peculiar and important monetary effects. These purchases are made with the Reserve Banks' own credit—they are not conditional upon the antecedent receipt of funds from any outside source. The seller of securities is paid in effect with a check drawn by the Reserve Bank on itself. Member bank reserves, therefore, rise whenever the Federal Reserve Banks purchase securities no matter whether the securities are purchased from commercial banks, insurance companies, savings banks, or individuals.

In order to maintain the level and structure of rates chosen for support, the Reserve Banks have had to absorb large amounts of government obligations from commercial banks, insurance companies, and others needing funds with which to accommodate private borrowers or seeking to hedge against the possibility of changes in the level of support prices. In an effort to prevent these purchases from inflating member bank reserves, the Reserve Banks and the Treasury have undertaken three principal types of action.

First, they have applied a varying portion of the Treasury's cash operating surplus to the redemption of maturing securities held by the Reserve Banks, particularly of Treasury bills, thereby offsetting to a very large extent the increase in member bank reserves resulting from market support purchases. This use of the cash surplus is a necessary instrument of control as long as the Reserve Banks are absorbing securities from the market. As an instrument of control, however, it depends not only upon the existence of such a cash surplus, but also upon the availability of that surplus when needed. To some extent the availability of these funds can be controlled by means of the war loan depository system. However,

only a portion of the funds used for debt retirement are now channelled through these accounts. In practice, neither tax revenues nor expenditures can always be controlled with sufficient precision to assure that a Treasury cash surplus will synchronize with the varying need to retire securities held by the Reserve Banks.[4]

Second, the monetary authorities have endeavored to offset the effect of support purchases by the Reserve Banks by upward adjustments in rates on short-term government obligations. Increases in short-term rates were initiated in the middle of 1947 in order to discourage investors from selling Treasury bills to the Federal Reserve Banks, which at that time had absorbed over 90 per cent of the total outstanding. Later, increases in short-term rates were made to achieve a more viable rate level and, in consequence, to enable the Federal Reserve Banks to shift some of their holdings of short-term government securities to the private market. This became more and more necessary as the impending reduction of the Treasury surplus threatened to preclude further cash redemption of securities held by the Federal Reserve Banks.

Raising the reserve requirements of member banks has been the third device for offsetting the inflationary results of support purchases. Within the past year required reserves have been increased by roughly three billion dollars. Increases in required reserves may actually complicate the problem of maintaining stable and orderly conditions in the government securities market since they are imposed horizontally and without regard to the reserve positions of individual banks. In the case of the individual bank, if the increase in required reserves is greater than the amount necessary to sterilize the additional reserves created by support purchases, the bank in question will be forced to sell government obligations to its Reserve Bank. If the increase in required reserves is not large enough to bring about this result, the additional requirement will have little restraining effect. To the extent that individual banks are forced to sell government obligations, the market in government securities churns about and, after it has settled down, the impact and burden of the increased reserve requirement come to rest on the shoulders of the commercial banks to the exclusion of all other classes of lenders.

[4]This is a roundabout method of debt retirement which is not without certain disadvantages and limitations. The choice of securities to be retired is in the discretion of the market. Consequently, the authorities are unable to give proper consideration to the longer-range aspects of debt retirement such as the appropriate maturity structure of the debt and its ownership distribution.

A certain degree of success in controlling credit has been claimed for the combined use of these three devices. Whatever success has been achieved so far by the program is to be attributed primarily to the use of the Treasury surplus in the retirement of securities held by the banking system. This surplus, a fortunate accident of circumstances, has been diminishing in amount and will probably disappear before long. Obviously, policies of monetary and credit control should not be left to the vicissitudes of our federal budget.

Although significant increases in the quantity of money and credit have been avoided during the past year, the fact remains that there has been a large expansion in private debt. The real test of credit control is the degree to which it succeeds in restraining the expansion of private debt, particularly in the areas where a rising debt is associated with rising prices or is financing private expenditures at too rapid a rate. The ability of non-bank investors to sell government securities in a supported market to the Reserve Banks enables the private demand for capital to be met without regard to the rate at which personal savings are currently being accumulated.

The preoccupation of the monetary authorities with conditions in the government securities market and their reliance upon the Treasury's cash surplus have caused them to minimize the role of flexible interest rates in credit control. Revisions in interest rates have been confined mainly to short-term government obligations, and have been undertaken only after it became clearly evident that alternative lines of action might fail to reduce the absorption of securities by the Federal Reserve Banks. Unless the availability of credit is delimited by an upward adjustment in the structure of interest rates, other more drastic means to combat inflationary pressures may be proposed, such as the rationing of capital funds and the imposition of direct controls over the government security portfolios of our lending institutions. These are extreme measures which have no place in, and are destructive of, a free market.

Agencies of Debt Management

Finally, the development of a long-range program of debt management depends upon closely coordinated operations between the Bureau of the Budget, the United States Treasury, and the Federal Open Market Committee of the Federal Reserve System—the authorities most directly and immediately concerned with this problem.

In the preparation of the budget, the Bureau of the Budget should, when conditions permit, make definite provision for debt retirement. I fully realize the difficulties involved. Estimates of receipts, expenditures, and the budgetary surplus may be affected not only by legislation but also by economic developments. However, I think it is highly important that budgetary surpluses available for debt retirement should not be an accidental residual but rather, in so far as possible, an integral part of budgetary planning.

Of necessity, Treasury operations respecting the reduction in total debt must be closely correlated with budgetary developments. But, in addition, the Treasury has extensive powers to modify the structure of the outstanding debt. Its powers in this respect are not confined solely to the redemption of issues at maturity. The Treasury has the power to purchase and retire securities before contractual maturity. For example, it may, under certain conditions, issue non-marketable debt to the public or to the trust accounts and retire marketable debt before maturity. Again, under certain conditions, it may purchase marketable debt on behalf of the various trust and special accounts. Furthermore, it may issue long-term marketable debt and retire short-term obligations or, conversely, it may issue short-term debt and retire long-term debt purchased in the market. Its authority to do so arises in three different ways:

First, under an enactment of 1881, the Secretary of the Treasury may at any time apply the surplus money in the Treasury, not otherwise appropriated, to the purchase or redemption of United States bonds at any price above or below par, provided that the bonds so purchased or redeemed shall constitute no part of the Sinking Fund, but shall be cancelled.

Second, under the laws governing the operation of the various trust and special accounts, the Treasury may purchase government obligations in the market above or below par subject to statutory requirements respecting investment yields. Under market conditions in recent years, the purchase of long-term marketable bonds has been confined mainly to the Federal Old Age and Survivors Insurance Trust Fund and to the Unemployment Trust Fund. Whenever the funds belonging to any one of the various trust accounts are invested in special obligations, cash is released to the General Fund, which can then be used to redeem marketable obligations at par.

Third, the Treasury may purchase or redeem securities as provided by the legislation of 1919, as amended, governing the Cumulative Sinking Fund. For the account of the Sinking Fund, the Treasury may purchase bonds and notes before maturity provided that the average cost of all bonds and notes does not exceed par and provided these obligations are cancelled. Because of these limitations, debt redemption since the end of the war has not been charged against the Sinking Fund.

In reality, the Sinking Fund is not a fund but simply an accounting device by which debt redemptions may be charged against the budget as current expenditures, whether or not the total marketable debt held by the public is actually reduced. Only if the Treasury has a budgetary surplus can the total federal debt be reduced. The Sinking Fund, as now constituted, makes no provision for raising funds with which to retire debt.

The third agency of debt management is the Federal Open Market Committee. In its operations this committee is now guided by the criterion that purchases and sales of open-market securities "shall be governed with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation in the country."[5]

The quantitative limit upon open-market purchases is the gold certificate reserve requirement respecting Federal Reserve notes and deposits. The Open Market Committee has complete freedom respecting the maturity of the obligations purchased in the open market and the price paid for such obligations. Securities purchased cannot, of course, be cancelled, but continue to constitute part of the total federal debt and can be resold to the market.

The development of long-range policies of debt management depends not only upon intelligent and constructive co-operation between the Bureau of the Budget, the United States Treasury, and the Federal Open Market Committee, but also upon a careful consideration and review of their individual and interrelated powers and responsibilities.

CONCLUSION

In this paper I have endeavored to call attention to six basic problems involved in the development of a constructive program of debt management. These are the problems of debt reduction,

[5]Section 12A, Federal Reserve Act.

the term structure of the debt, the ownership distribution of the debt, the interest rate structure of the debt, monetary and credit control in relation to debt management, and finally the administrative problems arising from the division of responsibility among various government authorities.

Debt management is never passive. Positive policies must be adopted. These policies, which will have important repercussions upon the entire economy, must of necessity be based upon agreement concerning the objectives of debt management. Some look upon the management of the debt as a means of controlling interest rates, others as a means of reducing the amplitude of cyclical fluctuations, others as a means of preserving the credit of the government. These objectives cannot all be completely reconciled and consequently need to be studied in their many ramifications.

Some months ago I urged the establishment of a commission consisting not only of members of Congress but also of recognized authorities drawn from outside the government to study and report upon the changes needed in our monetary and banking legislation.[6] This commission, if established, could very appropriately make a comprehensive study of the problem of debt management, which concerns not only monetary and credit policy but all phases of our economic life. If such a commission were established it should not be expected to report immediately. The importance of the subject matter requires exhaustive study and analysis. Extensive hearings should be held and the aid of experts enlisted in order to present to the American people comprehensive and objective findings on this most important topic.

In this paper I have expressed opinions regarding some aspects of the policies adopted by our fiscal and monetary authorities. I fully appreciate the difficulties under which they have labored. They have been compelled to evolve policies in an environment of acute international political tension. We are no longer at war but we must remember that we have not yet attained peace. Their task is a most complex and delicate one and they deserve our complex and sympathetic understanding in their efforts to carry it out.

[6] *Economic Significance of Postwar Changes in Commercial Bank Portfolios*, June 14, 1948.

EXCHANGE RATES: BOUND OR FREE?*

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I. INTRODUCTION

Lack of balance in the international accounts and the consequent "shortage" of dollars and certain other currencies are phenomena for which there are almost no precedents before World War I. On the contrary, in the pre-1920 literature on empirical international trade, we find frequent expressions of surprise at the speed, facility, and automaticity with which equilibrium was restored after any major disturbance. It would be naïve to suppose that the difference between past and present is wholly accidental. Yet most of such "explanations" as have so far been offered are worse than Taussig's famous remark with respect to some of the early situations that "it all just happened," since the thesis of chance, however unsatisfying, is certainly to be preferred to highly irrational fantasy garbed in pseudo-scientific habiliments. The true explanation, however, is very simple and is not far to seek. Before World War I, we had effective pecuniary machinery for securing equilibrium in the international accounts while, since 1920, our pecuniary institutions have been all but perfectly designed to prevent it.

II. FORMER AND PRESENT INTERNATIONAL MONETARY MECHANISMS

The typical national monetary system in the period prior to 1914 was either an "essentially unmanaged" gold standard or an independent currency with free exchange markets.[1] Either system would readily restore equilibrium in disturbed international accounts, not, as is ordinarily supposed, by changing the prices of a currently debtor (or creditor) country's experts relative to those of its imports, but by changing the relationship of the price-level of all internationally traded goods to that of purely domestic commodities in the several national entities. As soon as such a change occurred (in consequence of an international transfer of gold or an alteration in exchange rates) a shift in both consumption and production, in all affected countries, was inaugurated, with attainment of equilibrium a ready and inevitable result.

*This article is based upon a paper presented in Cleveland, Ohio, on December 28, 1948, at a joint session of the American Finance Association and American Economic Association on the subject of "Postwar Monetary and Credit Policies." The session was held in connection with the annual meetings of the two associations.

[1]By an "essentially unmanaged gold standard" is meant a standard under which the monetary authorities essayed no long-range control of the national money supply in substantial disregard of international moevements of the money material, but confined their attention to short-term smoothing operations.

A gold-standard, currently debtor country, losing gold without resort to any "offsetting" technique, would suffer a decline in its money supply, in its money income, and in the price-level of *domestic* commodities. The prices of internationally traded commodities, however (whether exports or imports of the country in question), would tend to remain unchanged since they would be demanded, and supplied, not only by the country *losing* gold but by many other countries (including those *receiving* gold).[2] The upshot of the segmented movement in domestic-international price relationships following an international transfer of gold was, therefore, that consumers in the currently debtor country find that internationally traded goods were now relatively dear. Even, with a *given*, and, *a fortiori*, with a *lowered* domestic money income, they would thereupon almost certainly reduce their takings both of imports and of exportables (leaving more of the latter to be exported). Such a country's *producers*, however, would tend to concentrate on the now relatively high-priced internationally traded commodities (both import-competing and exportable commodities) and would, under the stimulus of a persisting loss of gold, continue to do so until not only the discrepancy between imports and exports was eliminated, but the composition of industry in the country in question had become adjusted to the requirements of the new equilibrium in the international accounts.[3] The restoration of equilibrium would, of course, be facilitated and completed, by the occurrence of converse phenomena in countries originally receiving gold.

The same consequence would ensue in the case of a currently debtor country of independent currency and freely mobile exchange rates. The fall in the exchange value of the currency of any such country would raise the *domestic-currency* price of internationally traded commodities but would leave the prices of domestic commodities unchanged. The new price relationships in the affected country would operate in the same way as those just described for currently debtor countries under gold-standard conditions. Con-

[2]There is no reason to suppose that the influence on the prices of internationally traded goods of the country losing gold, or, indeed, receiving it, would be dominant over that of all the rest, and the respective influences of the countries losing and receiving gold would tend to cancel one another.

[3]The presumptive decline in the output of domestic commodities would, of course, steadily operate to raise their prices once more to the level of the internationally traded goods and, in a process of oscillation of sales, might lead to oscillatory international movements of gold. But this would not prevent the eventual attainment of equilibrium in the international accounts with all price relationships then substantially as they had originally been.

verse movements in currently creditor countries of independent currency would parallel the situation in gold-standard countries *receiving* gold.

From 1920, or thereabouts, to the present time, however, the vogue of "managed" currencies, whether gold or paper, has consigned this mechanism to oblivion. Monetary and credit management has consistently sought to "offset" the effects above depicted and has endeavored to relieve the "pressure" without which the said effects will not be achieved. For, if successful efforts are made to keep domestic prices from falling when an ostensibly gold-standard country is losing gold (and from rising when it is receiving gold), or to keep the exchange rates between given inconvertable and other currencies fixed despite a state of unbalance in the international accounts, there will be nothing to prevent the indefinite continuation of the current price relationships, and we shall then get a perpetuated disequilibrium with a consequent chronic "shortage" of what will now become very "hard" currencies.

The inherent contradiction between a nostalgic yearning for the fixed exchange rates appropriate to unmanaged gold standards (with national price-levels moving in substantial uniformity) and the modern desire for national monetary independence as a prerequisite to monetary management in the interest of high-level employment (with national price-levels moving in aberrant relationship to one another) is the real explanation not only of the present unbalance in international trade but of the inter-war tendency for the world's gold to move to our shores, of the strong demand abroad for stabilization loans from this country, and of the "shortage" of dollars in the outside world when the gold supplies of foreign countries had been more or less exhausted and the United States was no longer inclined toward foreign investment.

III. Exchange Rates as Prices, and the Effects of Controls

Exchange rates are prices. In a free market there is never a shortage of any commodity in the sense that the amounts of that commodity demanded and supplied, at the free market price, are out of equilibrium. It is, in fact, the function of a free market price to bring them to equality. There will, on the other hand, *always* be a "shortage" of any commodity if its price is somehow held below what marginal buyers in a free market would be prepared to give for it. The "shortage" of dollars in the foreign world is therefore solely and simply explicable in the fact that the dollar

is made available to residents of foreign countries, in necessarily rationed amounts, at lower prices in their respective currencies than in a free market, they would be prepared to pay for the given supply.

Under the unmanaged gold standard it was possible to have substantially fixed exchange rates, *and also a free exchange market,* only because the purchasing powers of the exchanged currencies over domestic goods were automatically altered in opposite directions in countries respectively losing and receiving gold. That is to say, that any tendency toward a shift beyond the gold points, in the relative values of the currencies in direct exchange—the one for the other—was automatically nullified by a flow of gold attended by corresponding, but opposite, shifts in their relative value vis-à-vis *domestic* goods within their respective spheres of circulation. The external and the internal values of each of the several currencies were thus automatically kept in the relationship that would at once procure fixed exchange rates together with the composition of national outputs and the price structure, that would promote equilibrium in the international accounts.

In the case of independent currencies and a free exchange market, a similar shift in the relationship between the internal and external values of any of them was achieved through a more sustained movement of exchange rates, with results more or less the same as those attained under the "unmanaged" gold standard with its very slight exchange-rate movements followed by the shift to an alternative mechanism.

With a few notable exceptions (viz., the hard currencies other than the dollar), the degree of internal inflation of the dollar has, at most times, been less (or, as the case might be, the degree of its deflation has been greater), ever since World War I, than that of any synchronous movement in the internal value of other currencies. Combined with a widespread predilection for the attainment, and maintenance, of fixed exchange rates, this has meant that there has been a persistent tendency toward the sale of dollars on the exchange market at prices, in other currencies, below the figure which the respective purchasing powers of the dollar and the other currencies would warrant. We can say either that the price-level in the United States has persistently been relatively low, on the basis of the established exchange rates, or that the exchange value of the dollar has persistently been low on the basis of existing price-levels. However, the matter is put, the upshot has

been a chronic excess of American commodity exports over imports, and that "shortage" of dollars which, in otherwise not unrespectable quarters, has been "explained" in terms of intractable inelasticities of international demand, of an overweening American productivity, or of some mysterious forces operating, it would seem in complete disregard of well-established economic laws. The notion stemming from a firm grasp of the doctrine of comparative advantage that neither national productivity nor poverty has anything to do with *balance* in international trade (except, perhaps, that poverty will operate to *insure* it) has been treated with a contempt that it is very far from deserving. The fact is that we need never look to anything more recondite than an inappropriate relationship between the internal and external value of the currency of any country, rich or poor, to have a *complete* explanation of lack of balance in its international accounts.

It will, perhaps, be worth while specifically to note a few of the many attempts, in the inter-war period, to preserve fixed exchange relationships in the face of national price-level kinetics which did not warrant maintenance of the established rate. The so-called, and widely lauded, international co-operation involved in these attempts was actually the primary factor in frustrating equilibrium and the free movement of commodities in international trade (both of which it professed to foster), since it removed the incentives toward these ends without which they will never be attained.

In the latter half of the 'twenties the Federal Reserve Board pursued a policy allegedly designed to promote the preservation of the gold standard in Britain after convertibility of the £ sterling had been restored at a rate against gold, and the dollar, which is now universally conceded to have been too high. The effect, and perhaps the immediate aim, of the Board's policies was to relieve the pressure on the British to deflate, and thus to prevent adoption of the only British policy which, in the absence of inflation in the United States, could produce equilibrium in the international accounts at the $4.86 rate for the £. Like all such attempts this policy merely cumulated maladjustments until the British lost all their gold and the £ fell with a crash in 1931.

Take now the case of German reparations. The Dawes Plan—hailed as a restorer of the gold standard in Germany and as a rational solution of the problem of German reparations payments—provided that whenever pressure should develop on mark exchange

the transfer of reparations was to be stopped, though the money involved in the payments within Germany of the untransferred sums was not necessarily to be abstracted, *pro tanto*, from the internal circulation. The Plan thus deliberately abandoned the only mechanism by which it could have been made to work, and it in fact worked only so long as lavish loans to the Germans, advanced by American investors, relieved the Germans of the necessity of increasing the ratio of their exports to their imports. Collapse was immediate when these loans were no longer forthcoming. It is worthy of note, however, that Germany automatically attained a balance in its international accounts on several occasions, before and after this period, when the Germans were in desperate straits for international means of payment but could get no foreign aid. This should surely occasion no surprise. It is, indeed, a truism, but it is a truism we seem peculiarly prone to forget.

Let us look now at the Tri-partite Agreement of 1936 which once more sought to establish, and maintain, fixity of exchange rates between the currencies of the participants but without a trace of any mechanism for co-ordinating the purchasing powers of the currencies concerned. Of this effort it need only be said that the outbreak of war merely confirmed the collapse that was already under way.

IV. The International Monetary Organization

It would seem that, after all this, we might have learned that we cannot both have our cake and eat it. We should know that we must either forgo fixed exchange rates or national monetary sovereignty if we are to avoid the disruption of equilibrium in freely conducted international trade or the system of controls and inhibitions which is the only alternative when the internal values of independent currencies deviate—as they always tend to do—from what was, perhaps, a correct relationship when the fixed rates of exchange were set up. Yet the old error was to all intents and purposes again repeated in the International Monetary Organization which did not much curtail national monetary sovereignty. It is true that some concessions were made to the consequent demand for flexibility in exchange relationships. But there is, nevertheless, a strong bias in the statute toward the ideal of rates maintained unchanged for an indefinitely lengthy period, and not even the slightest provision for the adoption by the various participating

countries of the congruent monetary policies without which a system of fixed exchange rates simply does not make sense.

It can be confidently asserted that it is only in the most extreme cases, or otherwise under the rarest of circumstances, that, in a still strongly Mercantilistic world, a group of nations will concede the case for a reduction in the relative exchange value of the currency of any one of them, since this will have the effect of increasing, on third markets, the competition of the devaluing country with the exporters of the others, and of increasing its sales to, and reducing its purchases from, those other countries. Yet, in view of the more or less justifiable horror with which sharp deflations are regarded, such a devaluation may be a practically indispensable condition of the restoration of a free-market equilibrium. When, then, countries insist upon national monetary sovereignty—as they will—the goal of free enterprise requires at the very minimum that, if exchange rates are to be bound *at all*, a covenant run with the contract to establish a presumption that a country may at its own discretion, with impunity and without the consent of any other country, lower (or raise) the exchange value of its currency at any time and in any degree. (If it does not have this power it does not, or course, possess *full* sovereignty.) The presumption might be rebuttable; that is to say, there might be provision for the imposition of concerted sanctions whenever there was clear evidence that the devaluing action was taken with predatory intent. But the burden of proof should always lie on those who oppose a devaluation. The adoption of the suggested rule would be to universalize the practice under the British Exchange Equalization Account, especially in the years from 1934-36. It is my convicton that the Equalization Account then provided Great Britain, and the world as a whole, with the best exchange situation we have had since World War I. With a flexible exchange rate the British international accounts automatically came into a balance that they have not known, before or since, during the period of monetary management in the modern sense, and the Equalization Fund might well have become the exemplar for all later "improvements" in international monetary organization.

There is, of course, good reason for so much exchange control as is necessary to prevent wide, non-functional, hour-to-hour, or day-to-day, fluctuations in rates, and also to stop fear-inspired flights from currencies. So much the Equalization Account provided. Anything beyond this limited "control," however, should be anathema.

The attempt to keep rates fixed over substantial periods of time, during which the relationship between independently determined national price levels is changing, is certain to cripple trade, evoke disequilibrium in the international accounts, and distort the composition of production in the several trading countries. A world of independent national currencies requires exchange rates that are readily mobile, in a free market, as the means of maintenance of a free international economy and, if exchange rates are not allowed to move in response to a practically inevitable shift in the relationship between uncorrelated national price levels, the ensuing exchange overpricing of the currency of a country of relatively rising price-level not only, as already shown, puts a damper on its exports, and a premium on imports, but sets its production in a mold that will surely bedevil even the *eventual* balancing of its international trade structure. Export industries, and industries competing with imports, are rendered unprofitable, while domestic industries, including those ministering to investment beyond the saved income of the community and, therefore, furthering the inflation, are given a shot-in-the-arm. Industries in the former of these categories will thereupon wither while those in the latter wax. Balance in the international accounts can then be attained, if at all, only by drastic controls of imports, and a forced draft on exports, so that any prospect of a free economy goes out of the window.

Once the composition of the national industry is distorted under a currency overpriced on the exchange market, moreover, the power of vested interest, and the fear of unemployment in the overdeveloped domestic trades if the process is reversed, operate to keep the distortion in being. The notion then grows up, and is supported with a plethora of pseudo-erudition, that it is *impossible* for the country in question to balance its international trading position. This may, in very truth, be the case so long as the existing composition of its industry is maintained.

The Western World is yearning for free markets in face of the fact that it has, quite unwarrantably, lost faith in the free-market price as an (all but perfect) peace-time allocator of resources. It has for years, and even decades, been interfering in markets, and adopting *ad hoc* therapies and prophylactics in compensation of one economic ill after another, without any regard for ultimate consequences. It has thus been steadily undermining the general health of the patient. We are in urgent need of a fundamental diagnosis

which , in my opinion, would compel the conclusion that, along with certain other agencies, the International Monetary Organization should, if not discarded, be radically transformed. The Organization asserts that it has no fixed ideas, that its administration is flexible, and that it can meet requirements as they arise. But there is little, if any, overt evidence of this, and persistence along the present lines will frustrate the very purposes for which the Fund was set up in that it will cumulate disequilibria, multiply and perpetuate controls, and store up shaky structures until they finally collapse in all-round devastation. As things now are, the Fund, even if it eventually sanctions a currency devaluation, must, if it is to restore equilibrium, permit a greater change in the exchange rate than would otherwise have been necessary. This follows from the fact that the devaluation should not merely be sufficient to rectify the current-account position of the country concerned but also clear up the floating debt accumulated under the prior overpricing of the country's currency as well as provide a strong incentive toward a reconstitution of its industry. Such a depreciation would, sooner or later, provoke a counter disequilibrium and require a revaluation in the opposite direction. All this is fundamentally much more disruptive of international business than a free exchange rate is ever likely to be. The practice of changing rates by intermittent steps has the further disadvantage of violating the rule against giving a speculator a "sure thing." In doing so it greatly enhances noxious speculation to the extreme discomfort of the monetary authorities.

We are in urgent need of a substantially automatic international monetary mechanism, persistently working toward equilibrium in the international accounts, so that we do not cumulate the disequilibria that now continue to plague us. If we will not accept co-ordinated monetary systems we must frankly face the fact that fixed exchange rates, even with a gesture toward flexibility, are a vicious anachronism.[4] The only real solution of the problem is the operation of the price mechanism in a free exchange market to equate national supply and demand in international markets.

V. Sham Money and All-round Distortion of Trade

The present situation is disruptive not only of the balance of payments between a given nation and the rest of the world but

[4]When a country has used its autonomous right under the International Monetary Fund constitution to effect a 10 per cent change in the value of its currency, is it precluded *forever* from any further similar action? Or does some Statute of Limitations finally apply?

diverts trade currents between any one of the countries and each of the others from the channels appropriate to all-round equilibrium. It also reduces the total flow. The dollar is now underpriced in terms of nearly all currencies, but it is underpriced against the various other currencies in very unequal degree. This means that some of the currencies, overpriced vis-à-vis the dollar, are underpriced as against the currencies of certain other countries. The result is a monstrous distortion of trade. To the resident of any country it is folly to sell in countries the currency of which is underpriced in his own, but it is highly desirable to buy in such countries.[5] The consequence is that imports tend to be obtained, so far as is at all possible, from the countries of relatively "hard" (i.e., underpriced) currency while exports are sold to those of relatively "soft" (i.e., overpriced) currency. Most countries tend steadily, therefore, to become still shorter of those "hard" currencies which are underpriced in their own monetary units (and, like all underpriced things, are already in short supply) while each adds to its holdings of the currencies overpriced in its own unit, the supply of which, like all overpriced things, is already excessive in that almost nobody wants to buy them at the official rate. The exporters and importers in any country are, of course, concerned to sell and buy goods only at what, when transformed into their own currency, are, respectively, maximum and minimum prices. It is the government, therefore, which is left holding the bag of depleted hard, and replete soft, currency. These, being valued, against the domestic currency, at the officially established rates are *officially* identical with one another, ratably to the domestic currency, but the plain fact is that one of them is real, and the other merely factitious, money. The latter has lost the essential monetary characteristic of being capable of use by its possessor to buy where, when, and what goods he likes. Governmental agencies, possessing large and growing stocks of foreign factitious monies, are, of course, impelled to get rid of them how, where, and when they can. They cannot (with good face) violate their own official exchange rates so they force their importers, if they are to get goods at all, to buy in countries of which the authorities possess a plethora of currency at prices which, at the official rates of exchange, are relatively high, rather than in countries where, at official rates of exchange and indeed, in reality, prices are relatively low. Con-

[5]The (warranted) assumption is that exporters will be compelled to deliver to their governments at the official rate any foreign exchange proceeds of their sales abroad, and that those who can obtain import licenses will pay their governments at the official rate for any foreign exchange turned over to them.

trariwise, but with perhaps greater reason, they compel their exporters, by one means or another, to sell in hard-currency countries at prices (in real money) which, at official exchange rates, yield the exporters much less of their own money than the "hard" currencies they turn over to the government ought to command, and much less, again at official exchange rates, than they could get in other markets of "soft" currency where the *real* returns *to the exporting country* might well be negative in that the exporting country would have been much better off if the resources involved in the production of the exports had been put to some alternative use.

The acquisition of allegedly pecuniary, that is to say general, titles to goods, which cannot in fact be exchanged for the commodities desired by their possessor, is, at best, of dubious virtue and, for the above-described practices (which discriminate against it) there is, therefore, at least a color of economic validity. There are now, however, several countries which can, or, at any rate, do, boast of a "favorable" balance in their international accounts though they are "short" of the "hard" currencies. The accounts of such countries are in fact, delusive. The authorities are contrasting their receipts of overpriced, factitious, money, at factitious official rates of exchange, with their expenditures in true money. But the "soft" currencies will not buy that amount (if any) of the "hard" money to which in the statistics they are assimilated. If all of the trade were measured in a real money, at the price for it prevailing in free (black) markets, the apparent "favorable" balances of such countries might turn out to be in fact very "unfavorable." The practice of valuing goods in factitious money as if it were real leads to the apparently crazy policy, already noted, of buying and selling in other than what, on the face of things, seem to be the best markets. Whether this is in fact as crazy as it looks is a matter which is difficult, if not impossible, of accurate determination.

All this, in any event, is the economics of Cloud-cuckoo Land. It issues out of the passion for fixed rates of exchange between currencies of deviating internal purchasing power, and the consequent exchange controls, which impel some countries, if they are to do business with certain others, to accept an alleged medium of exchange which they cannot, in fact, use to buy the goods they desire. There is, of course, a limit on this impulse and, when it comes into operation, a large potential volume of international trade, much of it to be desired, comes to a standstill. The countries

with overall credit balances largely composed of sham money cannot buy the goods that they desire because they have wasted their resources on the acquisition of this so-called money, available, if at all, only for goods they do not want. (Were it otherwise, such balances would not grow.) The countries with overall debit balances, on the other hand, have nothing to offer but increasingly uncashable I.O.U.'s, already in surplus supply, and so find it next to impossible to buy anything at all.

There would seem to be no real excuse for the drastic exchange controls now widely current unless the countries imposing them are aiming at totalitarianism, or bilateralism, or can parade the results of their policy to bolster a continuing claim to foreign aid.[6] If, nevertheless, we wish to abolish all such controls, and still maintain fixed exchange rates, we shall put all other polities in thrall in the monetary policy of the pecuniarily most powerful, or deflationary, country, since they will all be forced to adjust to the monetary policy, however bad, of such a country. If, then, any freedom in either international or domestic markets is to be preserved in a world of nations rightfully insistent on national pecuniary sovereignty are we not forced to the conclusion that continuous flexibility in the exchange-rate structure is the only answer?

VI. The Penalization of Monetary Rectitude

The International Monetary Fund was set up in fear of internationally communicated deflation and depression and of thralldom to any important country in which these phenomena were in being or in prospect. The allergy toward flexible exchange rates prevented the adoption of the only rational technique of escape from these evils and led to the inclusion in the statutes of a system of controls which was euphemisticaly dubbed "the rationing of scarce currencies." Deflation and depression were so impressed on the consciousness of the drafters of the legislation that they completely failed to take into account the evils of *in*flation with the result that, probably in innocence, they put punitive legislation into effect against such countries as might then pursue a policy of monetary rectitude and in favor of those on an inflationary junket. Since the currency of a country which merely fails to keep pace with general inflation in the outside world will, under fixed exchange

[6]For a refutation of the argument for controls as a means of excluding luxuries from a country that feels it cannot afford them, *cf.* Wilhelm Röpke, "Austerity—The International Crusade against Luxuries," *Commercial and Financial Chronicle*, Vol. 168, p. 497.

rates, always tend to become a "scarce currency," such a country would, under the statutes of the Fund, be subject to discriminatory action penalizing its export industries and forcing it to inflate to the degree prevalent abroad. These provisions therefore not only violate the professed purpose of our recently established international economic institutions to promote free, multilateral, non-discriminatory, trade, but they put a premium on progressive, and universal, inflationary practices.

It would seem that it is by no means altogether an accident that the volume, variety, and general beneficence of trade in the interwar period tended to be greater in the intervals in which flexible exchange rates were the prevailing mode than in those in which fixity of the rates of exchange of the currencies of all important trading countries had, for the time being, been achieved. The predilection for fixed rates seems to me to have been, and to be now, indulged in fatuous blindness to the disruption they cause in a world which, for good or ill, has long since come to regard the rules of the gold-standard game with something very far short of religious awe. To the extent that the Fund, or any other such organization, secures conformity with its bias toward fixed exchange rates it must (in the absence of monetary reforms which are nowhere except in certain academic circles yet taken seriously) diminish and distort international trade, promote the multiplication of controls, or force on recalcitrant countries the monetary policy of some one of its members. This policy will have no necessary, or probable, virtue, may be extremely vicious, and will, in fact, have no recommendation other than the power of its sponsor. The outcome will be the sabotage of all the ends for which the Fund was established and continuation of that practice of amicicide (murder by one's friends or killing by "kindness") under which gold and silver were garroted and the ideal of *stability* has been sacrificed to a bigoted and fatal defense of *status* in a highly kinetic *milieu*.[7]

[7]The *peculiar* virtue of the gold standard was its automaticity and when, in a feeble effort to cure some of the very real vices of that standard, the "friends" of gold destroyed this prememinent virtue they left us with an international monetary system then so bad as to compel, or induce, its almost universal abandonment. The "friends of silver," likewise, have in recent decades inveigled Congress into passing legislation to force up the (gold or currency) price of silver to levels above the (foreign) cost of production. The result was to impose such deflation on the few remaining silver standard countries as to lead them to shift from silver to debt currencies, and thus drastically restrict the monetary market for silver. Even for fractional coinage, in much of the western world, silver is being replaced by baser metals. Finally, the "friends" of fixed exchange relationships between national monetary units, as a means of facilitating multilateral, non-discriminatory, international trade on a free-enterprise basis, are losing their ends in a misguided enthusiasm for a means now wholly inappropriate to their purpose.

VII. Objections to Flexible Rates of Exchange

The objections to flexible rates of exchange are largely sophistical. Appropriately flexible exchange rates are not nearly so disturbing to business as fluctuating commodity prive-levels, which we still endure with shameful phlegm, and, when national price-levels are moving at different paces and perhaps in opposite directions, flexible exchange rates will counter rather than fortify the aberrations in commodity price relationships. Most of the uncertainty attached to flexible exchange rates, moreover, could be removed for the businessman as such with the development of an adequate futures market which would be all but certain spontaneously to spring up under a system of free exchange rate movements. If national price-levels are kept stable, or move together in the same direction and degree, a free market would, in any event, normally result in substantially unchanging rates of exchange, while, if the converse is the case, the attempt to secure fixity of exchange rates promotes such chaos in commodity price relationships as to twist trade out of all semblance to any truly economic order.

So far as long-term international investment is concerned we have never had a good medium in which to make the contracts involved, but if in lieu of the adoption of the really good medium we could set up if we would, they are denominated in what we more or less fondly imagine to be the best medium currently available, the real intent of the contracting parties will then, over the period of the contract, be better carried out under a flexible exchange rate system than under the burden of fixed rates not in correspondence with the underlying facts. The £ sterling, for instance, was, on the whole, a better medium of foreign investment under the flexible exchange rates of the early thirties than it had been in the preceding period when exchange rates were (presumptively) fixed, and there was, in fact, then no reluctance on either side to make long-term international contracts in terms of sterling merely because its rate of exchange against the dollar and other currencies unstable in real value was not unchanging. Since no existing money is good for long-term contracts, whether international or domestic, there would seem to be no cogent reason for tying the currency of one of the contracting countries to that of the other unless, and until, the anchor currency actually "stays put" in real value. If such a currency should be developed it would be the part of wisdom for other countries to adopt the monetary policy by which this happy

result was attained. Substantial fixity in the exchange relationships between all such currencies would then and then alone be a justifiable, and readily attained, objective. In the meantime, the only rational course is the adoption of a system of freely flexible rates of exchange in a free market for both goods and currencies.

VII. Summary

For nearly three decades the world has sought to combine essentially incompatible monetary objectives. International trade has, as a result, been in a chronic state of disruption, distortion, and imminent disintegration. Repeated efforts to prevent collapse have, in the absence of attack on the source of the trouble, given us at best a temporary *modus vivendi.* The United States has been the principal sufferer from this situation inasmuch as, to keep things going, it has been impelled practically throughout the period to subsidize the rest of the world on a very large scale. (For this, however, we have only ourselves to blame since it is we who have been most insistent upon the policies responsible for our loss.) In the establishment of the International Monetary Fund in 1945 we had not learned the obvious lessons of the inter-war period, and had forgotten that the days of the sacred repute of gold had long since passed away. The Fund, therefore, not only repeated the errors of most of its predecessor organizations but has added noxious features never before embodied in any international agreement. All this is the result not of malevolence but of a stubborn refusal to face facts. Unco-ordinated national monetary policies, non-discriminatory, multilateral, trade on the basis of free enterprise, and exchange rates fixed, even provisionally, cannot be made to mix. We must choose between them. If we insist on fixed exchange rates we must proceed immediately to the co-ordination of national monetary policies on a covenanted basis or we shall lose our bone in pursuit of a shadow. If a covenanted co-ordination of national monetary policies is held to be impracticable, the sooner we abandon any effort to keep unchanging exchange relationships between the various national currencies the better it will be for all concerned. This will require the reform, or demise, of the International Monetary Organization.

THE FLOW OF SAVINGS. II*

HOMER JONES
Committee for Economic Development

FIELDS OF EQUITY INVESTMENT FOR INSTITUTIONS

We now come to consideration of specific fields of equity where the savings which flow to the institutions can be invested.

Housing.—Housing is one of the great normal avenues of capital formation which should serve as an outlet for saving. We have earlier questioned whether there is much prospect that individuals will invest in housing equities in a satisfactorily large volume. We can now consider whether the financial institutions may make up the deficiency in equity investment in housing. The last ten years have seen a beginning in this direction. Up to the end of June, 1948, the life insurance companies had invested about $220 million in housing. The mutual savings banks of New York State have taken some steps in this direction. But to date such undertakings have been quite tentative and experimental. The $220 million of housing held by life insurance companies at the end of June, 1948, was less than one-half of 1 per cent of their assets. The $58 million which they had invested in housing in the preceding twelve months amounted to about 1½ per cent of the net investments which they made during the period. If the financial institutions are to play a significant role in the housing field, if they are to help keep housing in the field of private rather than public enterprise, their investments must be counted in billions of dollars rather than in tens of millions.

The indispensable feature for institutional investment in housing is that the managers shall see an opportunity for a good income therefrom. The essence of private enterprise is the attempt to maximize income. If the institutional managers see an opportunity to increase their income over a long period by investing in housing they may make such investments. If they cannot anticipate increasing their income they surely will not use this outlet.

The institutions may anticipate unattractive returns from housing for many of the same reasons which apply to individuals. Government guaranty of housing debt, government housing, rent controls, and the fear of all these may cause institutions as well as individuals to eschew housing investment.

*The first instalment of this article appeared in the October, 1948 number of this journal, pp. 1-26.

On the other hand some of the factors discouraging individuals from such investment do not apply so strongly to the institutions. The latter are not so affected by the income and inheritance taxes. They are less likely to meet with contingencies which force them to liquidate and can better look upon their investments as long-term or perpetual. They are in a superior position to achieve diversification of risk.

So long, however, as we have an atmosphere of government housing, of government guaranty of housing debt, and of rent control, housing equities are not likely to play a great role as outlets for institutional funds. But if institutional managers were able to anticipate that they could sell housing services in a free market they might, if given adequate latitude by the law, direct into housing a volume of funds justified by the potential demand.

The largest financial institutions can invest in housing directly. Each institution can carry out its own housing projects. This is the manner in which the life insurance companies have invested in housing to date. The largest institutions can put enough funds into housing that each by itself can achieve a reasonable degree of diversification of risk. If investments are to be sound it is necessary that there be diversification as to geographic location, type of housing, and rental category. The large institutions can engage in market research and can experiment with new types of housing.

The smaller institutions on the other hand cannot appropriately make such direct investments. The amount of funds which they can invest in housing cannot give adequate diversification. Properties could not be administered economically over a wide area. Research and experiment would not be feasible. This situation has been recognized in that the smaller life insurance companies have not made much use of the power to invest in housing. It has also been recognized by the New York law which requires that housing investments of mutual savings banks must be joint undertakings of three or more banks. But the difficulties of such co-operation may be illustrated by the very limited extent to which the mutual savings banks have made use of their power.

A possible solution to the problem of the smaller institutions is for them to invest in the shares of housing corporations. Such housing corporations financed primarily by the issue of equity securities are scarcely in existence today. But if the financial institutions were empowered and willing to make such acquisitions the

corporations would rapidly come into existence. The institutions, at least in the early phases, would no doubt be the chief stockholders. In the course of time individuals might also become important holders of shares.

There would be a real difference between this proposed ownership of shares of housing corporations and co-operative projects. Managements of the corporations would be completely independent entities. Once a management was selected by stockholders of a corporation it would have complete independence in undertaking projects and engaging in research and experimentation. Management and not the shareholders would determine policy. Certainly the shareholders would not participate directly in the making of specific operating decisions. By this device some element of venture and flexibility could be introduced into institutional investment in housing. New blood could be more readily attracted for management. The salary schedules and the time-honored procedure of the financial institutions would not need to apply to the housing projects unless they were clearly most appropriate.

Even the large institutions might find desirable the use of rather independent corporations to carry on their housing activities. Placing these undertakings in the hands of independent corporations and managements would relieve the managements of the institutions proper of a vast amount of worrisome detail. It would be desirable that the management of housing, after construction as well as in the planning and construction phases, be in the hands of dynamic, imaginative personnel.

There may be tax difficulties in the way of investing through more or less independent housing corporations as opposed to direct housing investment. If this is the case serious consideration should be given to alterations of tax law to encourage rather than discourage investment through independent corporations.

There is reason to hope that institutional investment in housing would contribute to stability in the rate of construction. If the institutions took a long view of their investments they would have no reason to reduce their rate of construction at times of tendency to general construction slump. Indeed they might very well be in a position to take advantage of readily available supplies and reduced costs at such times.

Institutional investment in housing should readily adapt itself to the inverse correlation of the age of housing and the income of

occupants. We have long been accustomed to new durable consumer goods being used by the higher income groups and the older goods by those receiving lower incomes. This has long been true in the case of housing. In the past generation it has come to be a practically universal phenomenon with respect to automobiles. The practice applies in some degree to other durable consumer goods.

It is not possible here to engage in an exhaustive analysis of all the economic and social aspects of older goods being used by persons of lower incomes. The practice is accepted without question in the case of automobiles. In the case of housing the practice is not universally accepted. I believe that the interest of all income classes will be best served if there is a free market in housing services. If there is such a free market, higher income groups will on the whole occupy newer housing and lower income groups will occupy older housing. This need not preclude cash allotments to lower income groups for increasing their housing consumption. Neither need it preclude minimum housing standards. Under the traditional system the relatively well-to-do can pay for the luxury of newness if they wish to do so. Others need not pay for that luxury. Government intervention designed to assure new housing for the lower income groups would preclude any extensive institutional investment in housing. If we cannot accept the widespread practice of handing housing down from one income group to another we probably cannot expect much institutional investment in housing.

If the institutions do invest extensively in housing they will probably find it to their advantage to anticipate this gradual transfer of the use of housing from higher to lower income groups. It will need to be adaptable to the requirements of each group of occupants.

The institutions will have to anticipate the needs not only of the various income groups but of families of varying size and character. As the needs and tastes of the family change it needs to move from one type of dwelling unit to another. Some dwelling units need to be adapted to the requirements of families with children, others to the requirements of the old. The former may be grouped by themselves and the latter likewise. Public facilities adapted to the needs of children such as schools may be concentrated near the housing which is adapted to children.

Successful institutional investment in housing would require a very flexible approach to the question of rentals. There is a great

tendency on the part of the institutions to look at their necessity for a certain return and set rents accordingly. It is of course true that the institutions cannot go into these undertakings unless they anticipate an advantageous average return. But they must anticipate losses and recognize that they must make some exceptionally high profits to offset some low returns and losses. They must charge what the traffic will bear on their fortunate investments and reduce rents to clear the market for their mistakes. On the whole the institutions should expect to get much greater net returns on their new properties than on the old. Not only can new properties be rented at a higher rate but also a smaller proportion of rentals will have to be used for maintenance and alterations in the case of the new properties.

Rentals need to be adapted to changes in the price-level. We hope that the future can give us greater price-level stability than has the past. Institutions cannot make housing investments except on the assumption that the chance of great secular price declines is quite limited. However, if price-level changes do occur, rents should be adjusted thereto. When prices rise, rents should continue to be used to allocate the supply of housing. Exceptionally high rentals should probably go into valuation accounts available for use when a contrary condition prevails; for the institutions must anticipate that, when price levels fall, they will find it necessary to reduce their rents accordingly.

There have been proposals for facilitating equity investment in housing by means of government guaranty of yield. Such a program may have merit. But we should not delude ourselves that it is free enterprise private property housing. It is government housing to the extent that the government would take the risk and make the basic policy decisions. If we are to have government housing there may be some virtue to some of it being carried out by the financial institutions as agents of the government. But there is no use pretending that it retains essential features of free enterprise which include anticipating consumer demands and taking a chance of gain and a chance of loss.

If housing corporations were to develop under the stimulus of institutional demand for their shares, such shares might offer attractive outlets for trust funds. Direct investment in housing is not commonly desirable for trust funds, particularly because of the difficulties of diversification of risk. Shares of housing corporations might avoid this difficulty and at the same time afford a

considerable degree of liquidity. Trust funds actually require a greater degree of liquidity than do those of the institutions. The institutions are in a sense immortal and may look upon their investments as perpetual. The longevity of trusts is decidedly less and they need frequently to be liquidated or divided on short notice. If housing corporations were to develop, trustees operating under the prudent man rule could well consider the merits of their shares as an outlet for funds. The desirability of taking advantage of such an outlet would offer another reason for the relaxation of laws governing the investments of trustees.

In summary, institutional investment in housing should provide a large segment of the housing services of the country, complementing those provided by direct individual investment. As a result a third means of investment in housing equities might develop; namely, investment by individuals in the shares of housing corporations. Institutional investment in housing like investment by individuals will depend upon freedom from the prospect of extensive government housing, government guaranty of loans and government control of rents. Extensive private investment in housing depends on participation in a free, unsubsidized market where possibilities of gain can offset possibilities of loss.

Other Real Estate—A second major field for equity investment by institutions is provided by rental real estate other than housing. This outlet may be a more likely prospect than substantial investment in housing. Government participation in the commercial real estate field has been less extensive and appears less likely in the future. We hear little demand for government construction of rental properties other than housing. Government has not done much by way of guaranty of the mortgages to finance such properties. Rent controls have not been so persistent as in housing. It is conceivable that government might proceed to become a dominant element in the housing field while leaving the commercial field to private enterprise. Both individuals and institutions can, therefore, with somewhat greater equanimity enter the field of rental commercial properties. Both can have relatively good assurance that they will not find themselves competing against subsidized construction. They can anticipate that any exceptional earnings which they make will be available to offset losses and unusually low earnings.

The institutions may find rental properties more advantageous than will individuals. The income tax system is by and large kinder

to institutions than to individuals. The institutions are able to get a greater diversification than are individuals.

The life insurance companies, at least nominally, have recently invested substantial sums in non-housing real estate. About $320 million, or a little over one-half of 1 per cent of the funds of life insurance companies were so invested at the end of June, 1948. During the twelve-month period, June 30, 1947, to June 30, 1948, about 5 per cent of the net addition to their assets was in this form. Such investments have developed almost entirely since 1945.

But it may be questioned whether these investments to date are really of a venture equity character. Almost universally they involve a fixed claim for rent payments by a highly responsible corporation. Economically the process is much more like buying the debentures of the leasing corporation than it is like venture investment in rental properties. This ownership of property which is leased for a long term is largely a substitute for lending. There is probably a tax advantage involved, but it is difficult to see how the arrangement can really increase the borrowing power of the leasing corporations. The value of the real estate acquired by the insurance companies plus the borrowing of the corporations is surely not commonly greater than the total borrowing power would be in the absence of this arrangement. All this is not to say that the current lease arrangements are not mutually advantageous for the institutions and the corporations. It is to question whether the device constitutes a net addition to investment outlets. From the standpoint of this analysis debt is involved because of the fixed charges to which the corporation is subject. Fixed rent charges are just as much an impediment to continuous stable investment as are fixed interest charges.

If the institutions are to engage in genuine equity investment in rental commercial real estate a new departure is necessary. A net contribution to investment, a net addition to the outlet for institutional funds, will depend upon taking risk. There is some reason to believe that genuine equity investment in rental commercial properties would be no more risky than investment in rental housing. The fragmentary record of the past indicates no worse experience with commercial properties than with housing.

Much the same principles which apply to housing investment also apply to commercial property. Diversification of risk, not only geographically but by type of property as well, is of the essence.

The large institutions can efficiently make their own investments. Smaller institutions will need either to participate in co-operative investment or to purchase the shares of corporations engaged in supplying the services of commercial properties on a rental basis. If such investment companies came into existence they might constitute active outlets for trust funds. The savings of individuals might also flow directly into these companies. Yet more dynamic management will probably be needed than in the housing developments. The product will be more varied and anticipation of demand more difficult.

A flow of funds into rental commercial real estate will meet a demand for which net investment has been lacking for almost twenty years. Since 1929 construction of commercial properties has probably not kept pace with depreciation and the most obvious obsolescence. At the same time population has increased. Production has grown still more rapidly.

Institutional investment in commercial properties would be of the utmost benefit to small businesses. Small retailers and manufacturers need rented premises. If the supply of rental properties can be increased, a major step will have been taken to augment the business opportunities of small and medium-sized business.

Business Equities.—The third main possible equity outlet for institutional savings is business equities. If the savings of individuals which flow into the institutions are to be available to all the important segments of the economic system, business enterprises must have access to them. Of course institutional funds have long been available to business through their holding of bonds and other evidences of debt. This is all very well if the proportion of savings going into the financial institutions is small. But if the great bulk of savings go to the institutions we may question whether the debt mechanism is adequate. Savings may fail to flow to business sufficiently in the debt form, first, because business managers may have inhibitions with respect to debt, and second, because the institutions may not find debt available of appropriate quality and quantity. The only evident alternative is for the institutions to invest in business equities.

Business equities have commonly been considered improper institutional investments because of possible decline in value, in some sense of that term. In discussing the questions of liquidity and valuation we have tried to indicate that this may not be a decisive

objection. The only really important question is whether the managers of the institutions can see an opportunity for increasing their long-term earnings prospects by such investments.

While corporate stocks have never constituted a sizable portion of the assets of the intermediary institutions, some types of institutions have been permitted by some states to make a limited amount of such investments. Life insurance companies have more commonly been given this power than have other types of institutions.

A distinction is frequently made between the power to invest in common and in preferred stocks. This distinction is a most reasonable one. It is only the common stocks which have the chance of exceptional return to balance against the possibility of low return or none. It is the acquisition of common stock which involves the greatest necessity for anticipation of demand and cost conditions over a long future period. Acquiring and holding common stock involves bearing the chief burden of the entrepreneurial function. From the point of view of this discussion the common stocks are the purest equities. The preferred stocks partake much more of the character of debt. The topic which we consider here is primarily investment in common stock.

If stock is to play a significant role as an outlet for institutional funds present laws must be substantially altered. At present New York prohibits all investment in common stocks, and the institutions of other states are thereby greatly inhibited. But legal permission to invest in common stocks will by itself be of limited significance. So long as insurance companies are subject to the current rules for valuation of assets they cannot invest substantially in common stocks.

We may roughly distinguish two types of business enterprises which need to be financed. There is the large business which can efficiently market its securities in the general public markets. There are the other businesses which must depend upon retained earnings or direct placement of their securities. Both large and small financial institutions could acquire equities in larger businesses by simply buying their shares in the open market. This is the method now followed. There would seem to be no need or justification for altering it. The alternative is private placement. But private placement of the securities of large corporations with small institutions would be impractical or even logically impos-

sible. Private placement with large institutions would be inconsistent with avoidance of concentration of risk and control. Small as well as large institutions can get adequate diversification by investing in the publicly marketed shares. As a means of selection and management smaller institutions may see fit to purchase the shares of investment companies which in turn hold corporate common stock.

If institutional funds are to flow to the businesses which cannot engage efficiently in public flotations, private placements will have to be used. This problem of the flow of institutional savings into the medium- and small-sized business is the most difficult which we have faced in our analysis. Businesses otherwise of efficient size give way to the large-sized enterprise because the latter is better served by our financial institutions. It would be a very serious matter if we took steps which permitted the savings of the country to flow still more readily to large business and were able to do nothing to facilitate their flow into the medium-sized or small business. In considering the objections which may be raised against institutional acquisition of equities in these businesses, they should be balanced against the possibility of any other practical private enterprise means for savings to flow to them.

The objections to institutional investment in the equities of small and medium-sized businesses are probably two in number. First, it may be questioned whether there is any efficient practical way for the smaller institutions to make such investments. Second, it may be objected that investment by the large institutions will result in dominance.

Small institutions may be able to make their funds available for investment in the equities of small and medium-sized business by acquiring the shares of investment companies. Such investment companies have not played any significant role in our economy to date. However, if a large demand for their shares should appear, they would no doubt increase in number and size. Such independent investment companies may also offer the best means for the large institutions to invest in the small and medium-sized businesses. Trust funds and individuals might find such companies attractive.

These investment companies will need to be large enough to achieve a wide diversification of risk. At the same time there should be enough of them to provide competition in the business. Single companies will need to operate in many geographic areas. Some compromise will have to be worked out between the efficien-

cies of specialization on the one hand and the desirability of competition and diversification on the other. If an investment company should undertake some investment in equities in medium-sized department stores, it will acquire knowledge and skills which it will be tempted to use in concentration of investment in this kind of outlet. But in the self-interest of diversification and conformity to the anti-trust laws, the temptation must be avoided.

Whether direct or indirect institutional investment in non-publicly issued equities can ever be of substantial volume and significance cannot be said with certainty. All we can do is to give such a development an opportunity. Legal power and an active interest in the possibilities on the part of institutional managers and government supervisors are necessary to give this outlet a chance.

Whether the institutions engage directly or indirectly in the direct placement of equities there will be considerable concentration of power. If the equity funds for a small or medium-sized business, supplied by financial institutions, are to be of significance they must account for a substantial percentage of total capital funds. They must be 20 or 30 or 40 per cent of the total in many separate businesses. The problem of the relative power which would be exercised by the institutions as compared with the other holders of equities is one which deserves a great deal of study. Effort should be made through law and professional ethics to assure that a financial institution will not become a majority owner of the equity of a business. But it would be fatal to prohibit the institutions from exercising the usual voting powers of common stockholders. If they were deprived of that power they certainly could not in good faith make equity investments.

The acquisition of privately placed equities would probably have the greatest chance of success in the case of medium-sized business. The smaller the business the greater the per dollar cost of administering equity investments. Smaller businesses lack the continuity which institutions need for their investments. If the smallest businesses of the country are to be adequately financed they must depend upon individuals and families as a source of equity funds.

The private placement of equities might extend to relatively large corporations which now commonly make public issues of their stock. It is not evident that any net social advantage would arise from such a development. But we should recognize that once the possibility of private placement of equities appears, it may

have unanticipated ramifications. However, direct private placement of the stocks of very large corporations would not be practical if single institutions are to practice diversification and be limited in their holdings of a single large corporaton to a very small fraction of the total stock. If it was considered desirable to avoid impingement of direct placement upon public issue it might be necessary that the investment companies patronized extensively by the institutions be subject to the same supervisory rules as the institutions themselves.

Institutional investments in corporate securities have long been subject to considerable control by law and by government supervisors. If it has been desirable or necessary for such supervision to be applied to corporate debt, what is the case with respect to corporate equities? Since equities are generally considered a more risky investment than debts, it might seem plausible that the equity investments should be subject to even more rigorous controls than debt investments. States which permit investment in stocks commonly attempt some control of the characteristics of the specific shares which can be purchased. Most common are requirements concerning the dividend and earnings record of the issuing company. But I am very skeptical about setting down rules which will indicate the investment character of stocks. Rules must be crude and the impression of exactitude may do more harm than good. Without rules responsibility for investments is definitely on the managers of institutions. Conformity to crude rules gives an impression of satisfactory investment management which may very well be unjustified.

Laws and supervision should concentrate on requiring diversification of risk. Such diversification will aim at a claim on a cross-section of business income. If the great bulk of personal savings is going to flow into the financial institutions, acquisition of a representative claim on business income is the best that we can hope for the investments of the typical institution. Achieving reasonable diversification is a problem of management. Government supervisors ought not to interfere except in cases of gross and obvious concentration of risk. Regulations limiting the proportion of stock of a large corporation which may be acquired by an institution will be a modest contribution to avoiding concentration of risks. At the same time they help to limit concentration of control of business enterprises by financial institutions.

Limitations upon the total amount of common stock which may be held are commonly applied to the life insurance companies. They are usually stated in terms of a proportion of total assets. The net acquisition of stock in any one year might also be limited to a percentage of total assets. For example total common stock held might be limited to 25 per cent of total assets and net acquisitions in any one year to 5 per cent of total assets. The limitation on acquisitions in any one year would contribute somewhat to diversification over time. It would prevent an undue concentration of investment at a single phase of the business cycle. Something might also be said for limitation of the gross annual investment in stocks in relation to total assets. A limitation to, say, 10 per cent would restrict somewhat a speculative treatment of the portfolio.

Government Control

For the financial institutions to broaden the outlet for their funds, particularly in the direction of equities, controlling laws would need to be radically revised. Institutional managers, the part of the public interested in such matters, and the government supervisors would need to be convinced of the desirability of such changes. The law should implement the principles of valuation and liquidity which we have discussed above. It further should enunciate the principle of diversification.

But given appropriate amendment of the law a great responsibility would still rest on the supervisory agencies of the government. They would have to appreciate the objective of the diversification rule. Unless they were administered with understanding and approval, the valuation rules might lose much of their intended effect. The most important aspect of appropriate provision of liquidity by government agencies is the anticipatory effect. It is necessary that supervisors have and instill confidence that stable principles of valuation and liquidity will apply during all phases of the business cycle. The supervisors must see that the institutions need to invest with an eye to the long run and not with primary emphasis upon market fluctuations. Supervisors have tended to view the liquidity problem from the standpoint of each institution by itself. For a satisfactory solution to our problems they must see the liquidity question primarily from the viewpoint of the financial institutions as a whole. They must see that the liquidity problem cannot be met by each institution acting by itself but must be treated as primarily a matter of public policy.

GOVERNMENT CAPITAL FORMATION

Government may participate positively in the flow of savings into capital formation. It may make loans and may guarantee loans and even equity investment. Government may itself engage in capital formation.

We have had considerable experience with government guaranty of private debt. In its modern manifestation it started with farm debt in 1917. In the Great Depression government loans and guaranty of loans were used in connection with housing, farming, and finally, business enterprises. These prewar loans and guaranties have now in fact or in effect been liquidated by the inflation. The inflation has created a condition such that these loans could be refinanced privately. This ostensibly happy outcome proves little one way or the other about the desirability or implications of such government activity.

If government guarantees equities, the government is itself in effect the entrepreneur and we have to that degree substituted the state for private enterprise. If government makes loans which involve risk it is assuming a responsibility in the allocation of resources which is inconsistent with the principle of private enterprise. If it guarantees a loan it is taking the risk and the situation is essentially the same as in the case of government loans.

But the most important aspect of the government loans and guaranty of loans is not their infringement upon the field of private enterprise but their effect upon the anticipations of private enterprisers. This field deserves much more attention than we can give it here, but a few tentative conclusions can be outlined. We have argued above that in the field of housing, government construction, loans and guaranty of loans will be a major element keeping private enterprise out of the field. Of course a great deal depends upon whether private enterprise considers such governmnet undertakings merely temporary. If they are looked upon as sporadic and not indicating a trend, they need not inhibit private investment. But if private enterprise believes such government undertakings will be pursued to whatever degree is necessary to maintain high employment, then it will withdraw completely. It cannot compete with government money if that money will be forthcoming to whatever degree is necessary to maintain high employment. Private money will prefer lending to the government at the certain government money rate to being driven to such an uncertain return in

competition with the government. It may be argued that if private enterprise has confidence that it is superior to government enterprise in efficiency it should be able to anticipate this competition with equanimity. But it can have no confidence that government prices will reflect the degree of efficiency of government enterprise. The powers of the government to tax and to borrow prevent any assurance that pricing will reflect the degree of efficiency.

Government advances of credit and government investment may be viewed simply as a means of filling in gaps when private investment falters rather than a regular part of the economic process. But private investors can have little confidence that political exigencies would permit private investment to be used in this manner. If private capital formation at some time proves to be totally inadequate, public credit and capital formation will have to be used. But we can have no confidence that such a development would be consistent with revival and maintenance of private enterprise.

The Immediate Prospect

This discussion has been related to aspects of inadequate capital formation in relation to the propensity to save. We have had periodic or even chronic inadequacies of capital formation in the past. This problem may plague us at some future time. But it seems worth while to place our discussion in perspective with regard to the economic situation of the immediate past, the present, and the immediate future. During some eight years since about 1940 we have had no immediate problem of inadequate outlets for savings. Great government deficits have afforded the chief outlet. Government guaranty of loans has supported outlets in some fields. Increasing price-levels have contributed to the ease with which funds could be borrowed for capital formation.

Indeed these years have been a period of high employment when savings outlets exceeded the amount which people wanted to save under stable prices. The excess outlets have been able to get funds from expansion of the commercial banks and of the currency. This inflation has made possible a matching of the rate of saving to the rate of savings outlets, but only by experiencing the evils of price inflation. The price of inflation might have been avoided by imposition of appropriate restrictions on bank expansion and appropriately higher taxes.

During the past two years government deficits have disappeared as outlets for savings, but private capital formation alone has pro-

vided more than sufficient outlets. Excessive outlets and consequent price inflation have been made possible by expansion of private debt held by the commercial banks and by the attempt of the public to reduce their money holdings. The commercial banks and savings institutions have found it possible to expand their holdings of private debt because of the very favorable prevailing ratios of debt to equity and debt charges to earnings in the business system. During this postwar period the progress of price inflation might have been avoided by appropriate contraction or limitation upon expansion of the commercial banks. By expanding their loans the banks have given the businessmen and buyers of housing funds with which to bid up the prices of the limited supplies of resources, materials and manpower.

Today as always there is disagreement as to whether the immediate prospect is for excessive or inadequate outlets for savings. In my own opinion the odds strongly favor excessive outlets. We are reducing taxes and increasing government expenditures thus reducing the supply of government saving and possibly creating a deficit which will provide an outlet for saving. At the same time I believe we have three necessary conditions for adequate if not unduly great private capital formation. Businessmen and heads of households are very anxious to engage in great capital formation. Currently low debt ratios and government guaranty of housing debt make it possible for the financial institutions to expand greatly through the increase of debt. Finally the commercial banks are in a position to extend credit without practical limit.

The use of monetary and price inflation to facilitate adequate outlets for saving might go on indefinitely. Expansion of the banks may induce price inflation. Price inflation will maintain the relation of equity to debt. With debt not increasing in relation to equity the financial institutions will find it possible to continue to invest in debt without reducing their standards. Price inflation will yield profits which will stimulate adequate further demand for capital formation.

But there are a number of flies in this ointment. The injustices and maladjustments involved in such chronic inflation may be intolerable to large segments of the population. Further, it is doubtful if chronic inflation of this type can be realized. It seems very likely that conditions which permit chronic inflation will result in accelerating inflation. I do not know at what rate this

acceleration might take place but I fear it would be sufficiently rapid to destroy our monetary and price system in a very few years. Accordingly I believe that if we are to preserve our economic system we must not maintain conditions which will permit chronic inflation. We must find better bases for achieving a matching of saving and capital formation which is consistent with high employment.

It may be suggested that we can control the rate of inflation. Possibly we can have an inflation which will just be sufficient to keep the relation of debt to equities and the relation of debt charges to profits from rising. An opinion concerning this possibility is a matter of political judgment. It appears to me that such controlled inflation is highly improbable if not quite impossible. We seem to have great difficulty getting much agreement on the desirability and means of achieving a stable price-level. It would be immeasurably more difficult to get agreement on the objective, the means, and the appropriate rate of a steadily rising price-level. Planned creation of inflation would serve as a source of equity by systematically reducing the purchasing power of holders of debt. Debt holders are the most numerous propertied class. It is not conceivable that there would ever be popular support for the systematic transfer of property rights from the holders of debt to the holders of equities.

If planned inflation is inconceivable and uncontrolled inflation is intolerable and disastrous we must put our minds to the maintenance of a stable price-level. We must consider how a rate of saving and investment consistent with high employment and stable prices can be achieved.

This discussion has indicated that one of the requisites for an appropriate equating of saving and investment is for a considerable proportion of capital formation to be financed by equities. But for a temporary period capital formation at a rate consistent with high employment and stable prices may be feasible primarily through debt financing. If at a given time debt stands at a very low level in relation to equity, savings may for a considerable period be able to flow into capital formation at an optimum rate primarily in the debt form. The ratio of debt to equity will increase but so long as it has not become inordinate according to the standards of the savers, the savings institutions, or the borrowers, high employment may be feasible. This may be the immediate prospect. In most segments of the economic system the ratio of debt to equity

is currently very low as judged by historical standards. Accordingly even if we were to pursue a monetary policy which would give us reasonable price stability, and capital formation were financed primarily through debt, we might see an adequate flow of savings into investment during the next few years. But from the point of view here presented such a situation should not be viewed with equanimity. If capital formation were financed primarily through debt, and stable prices were maintained, the debt and debt cost ratios would steadily rise. Gradually more and more households, firms, and fields of capital formation would reach debt and debt charge ratios which would inhibit borrowers or leaders or both. The high debt ratios might operate particularly as inhibitions to capital formation under the stimulus of a recession initiated by whatever cause.

In the meantime our danger is that we will be falsely reassured by the current adequacy of capital formation. The financial institutions may be less worried than some time ago about the lack of outlets for their funds in private capital formation. They have been finding private outlets. They have become somewhat adjusted to a low level of interest rates and the rates have somewhat strengthened. If the current low debt ratios resulting from the inflation of the past eight years can be used to give us a breathing spell to devise means for savings to flow into equities, they will perform a lasting benefit. The danger is that they will simply be dissipated in a few short years and we shall find ourselves again with intolerably high debt ratios and no means to rapidly increase the flow of savings into equities.

Summary and Conclusions

The flow of savings into real capital formation is of great importance to maintenance of stable production and high employment. It is likewise of significance for high per capita production. The major problem of savings seems to be, not that they are too high or too low, either chronically or from time to time, but that the propensity to save and capital formation are not properly synchronized. We need stability of the propensity to save and stability of capital formation, and we need synchronization of the two.

This discussion has dwelt upon one aspect of the flow of savings: namely, the propensity of savers to place their funds in cash, banks. savings institutions, and debt. It has been suggested that this pro-

pensity may be chronically so great as to prevent capital formation at rates consistent with stable high employment and the propensity to save. If then it is important that a greater portion of savings go into equities there are two chief means to that end. First, individuals may see fit to invest more in equities. Second, the banks and savings institutions may be permitted to and see fit to invest in equities.

Among the possibilities that need to be evaluated are the following:

1. Increase of the inequality of income after taxes
2. Reduction of the tax burden on equity income
3. Reduction of the positive attractions of the intermediary financial institutions
4. Abandonment of government competition, price controls, and restrictions on profits
5. Grant of greater legal power to the institutions to invest in equities
6. Public policies, particularly with respect to valuation and liquidity, which will enable the institutions to invest in equities.

Fortunately the present low debt ratios give us time to put these reforms into effect.

THE DEMAND FOR FUNDS BY AMERICAN BUSINESS ENTERPRISES: RETROSPECT AND PROSPECT. II*

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IV. DEMANDS FOR FUNDS BY BUSINESS DURING THE POSTWAR TRANSITION AND BOOM, 1946-48

The year 1946 marked the end of the postwar reconversion and the beginning of the subsequent boom. In retrospect it is apparent that reconversion, in a physical sense, was effected much more smoothly and speedily than even the optimists had expected. The Federal Reserve index of physical volume of manufacturing and mining production reached an annual average of 235 in 1944 at the peak of the war effort, fell to 170 in 1946, but subsequently it made a good recovery to the current level of around 190. But meanwhile, trade, service, and other industrial divisions not included in the Federal Reserve index expanded rapidly to a point where employment in non-agricultural establishments exceeded the wartime peak by 1947.

The most spectacular postwar economic change, however, came in the field of prices. Released from wartime rationing, allocation, and price controls, and in the face of unprecedented demands for goods and services by consumers, business enterprises, and governments, wholesale prices advanced 56 per cent from their 1945 level within less than three years. Mainly as a consequence of the price factor, gross national product rose from $203 billions in 1946 to an annual rate of $246 billions early in 1948.

Against this broad economic background of high employment and price inflation, the following salient developments in American business financing may be observed:

First, an enormous increase has taken place in outlays on new plant and equipment. From an average annual level of about $6 billions during the war years, expenditures for plant rose to $12 billions in 1946, to $16.2 billions in 1947, and to a planned level of $18.7 billions for 1948. Even so, it is probable that the physical plant put in place during 1948 will be about half again as large as the quantity produced annually during the early 1940's. Business has begun to cut down the backlog of needs for fixed assets to meet the requirements of a fully employed economy operating at capacity. It is necessary to recall, however, that this backlog is very

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large. Depreciation charges of all corporations are currently running at a rate of about $10 billion per annum, so that the *increase* in investment in fixed assets planned for 1948 is around $8 billions. This should be compared with a possible war-end "deficit" in the plant required at full employment estimated previously at $60 to $80 billions in current prices. On this basis, it would require nearly a decade of spending on new plant and equipment at the planned rate for 1948 in order to erase the deficit.

This conclusion appears less startling if it is assumed that the present postwar price-level does not recede significantly. When corrected for price changes, the planned 1948 outlays on plant and equipment are only 19 per cent above those made in the boom year 1929 and only 32 per cent above the average for 1926-30.[17] These increases are no more than proportionate to the gain in population and in the size of the American economy since the twenties. Indeed, assuming no decline in price levels, buoyant markets for equity securities, and a high level of confidence in future profit prospects, it would not be surprising to witness still higher plant and equipment outlays in future years.

Second, a very large postwar increase has occurred in the dollar value of inventories carried on the books of non-financial corporations. After five years of stability at a level of $27 billions during 1941-45, inventories of all United States corporations mounted to $36 billions by the end of 1946 and to $42 billions at the end of 1947.[18] The 56 per cent increase in dollar value during these two years may be accounted for to a major extent by the rapid rise in wholesale prices. The increase in physical quantity of inventories has been moderate. In fact, the year-end ratio of inventories to sales (for the preceding years) of American manufacturing corporations *fell* from about 18 per cent in 1940 to 14.5 per cent in 1947.[19] To restore the ratio to its 1940 value would have required an additional 5 billion dollar investment by manufacturers in inventory holdings.

It is very difficult to weigh the conflicting factors that will determine the appropriate inventory/sales ratio for business as a whole in the future. On the one hand it is possible that the ratio would tend to be smaller under conditions of high employment and active demand than under conditions of under-employment such as

[17] Machinery and Allied Products Institute, *Bulletin No. 2074,* May 7, 1948.
[18] *S.E.C. Statistical Series, Release* No. 797.
[19] *Survey of Current Business,* May 1948, p. 8.

obtained in 1940. Also, continuous improvements in transportation and communication work for secular reductions in the ratio. On the other hand, it is evident that normal inventories had not been re-established in many important lines by mid-1948, notably in automobiles, most producer goods and equipment, and building materials. Sales in these industries were virtually in a production-line-to-consumer basis. On balance, the prospect is that a considerable further increase will occur in business holdings of inventories, assuming present price-levels and high employment. Business is not yet stocked up for a fully employed economy.

Third, as a consequence of the heavy increases in plant, equipment, and inventory, American non-financial business corporations have been reducing their liquidity since 1945. Non-financial corporations reduced the sum of their cash and holdings of government securities from $42 billions at the end of 1945 to $36.6 billions at the end of 1947.[20] Because business built up admittedly excessive holdings of liquid assets during the war years, the question arises whether the postwar transformation of part of those assets into inventories and plant and equipment has left business with ample cash and equivalent for the current volume of transactions. Recent figures on sales for all non-financial business corporations are not available, but sales of manufacturing corporations rose by 145 per cent between 1940 and 1947. This compares with a 142 per cent increase in the liquid assets of all non-financial corporations. The figures therefore suggest that the prewar normal liquidity position had approximately been restored by the end of 1947. If this is true, business as a whole will not desire to continue to finance expansion in other assets partly by reductions in liquid assets. It will seek other sources of funds with increasing urgency.

Fourth, business corporations have enjoyed very large profits after taxes since 1945, and have so far financed the major part of the net increase in their total assets by retaining profits. The removal of the excess profits tax in 1946 resulted in a sharp upward spurt in corporate profits. Yet conservatism in dividend payments continued. As a result retained profits for all U. S. Corporations mounted to $6.7 billions in 1946 and to $10.3 billions during 1947. Nearly one-half of the expansion in the total assets of business corporations since the war has been provided for by a plow-back of

[20] S.E.C. *Statistical Series,* Release No. 797.

earnings.[21] This has been a much more important source of funds than the reduction in holdings of liquid assets. It is not likely that it will continue to hold its present importance, both because somewhat lower profits are likely to develop even in conditions of prosperity, and because the ratio of dividends to profits is likely to increase. Like reduction in liquid assets, retained earnings have probably passed the peak of their importance in financing postwar business expansion and will have to be replaced in part by external sources of funds, if vigorous economic growth should continue.

Fifth, a final salient postwar development in business financing has been the marked revival of resort to external sources of funds by business. Bank credit to business—measured by outstanding commercial loans of all insured banks—nearly doubled during the two years, 1946 and 1947, rising from $9.5 to $18 billions.[22] Recently, it has tended to stabilize. In addition, the capital markets have witnessed a recrudescence of new money financing of remarkable dimensions. During the same two years no less than $8.25 billion of securities were issued by domestic corporations to obtain new money. The aggregate amount of new money securities issued in 1947 exceeded any previous years in American history excepting 1928 and 1929. Despite the sharp decline in equity security prices beginning in mid-1946, equity security issues shared fully in the revival of activity. The important fact, however, is that the security markets were still playing an unimportant role in business financing *compared with that which they played in the 1920's*, after due allowance is made for economic growth and the increase in price levels. Higher equity security prices are a condition of developing large volume.

Analysis of the sources and uses of funds by American business enterprises during the wartime and early postwar years yields certain generalizations that are pertinent to the estimate of future demands:

First, the growth in the book value of total business assets has *lagged* far behind the growth in gross national product. It may

[21] The relative importance of different sources of funds for financing expansion in business assets may be summarized as follows: During 1947 non-financial business corporations made a *net* increase in the book value of plant and equipment, inventories, and receivables of $22.4 billions. Of this amount, $10.3 billions was provided by retained earnings (46 per cent), $7.8 billions by bank loans and security issues (35 per cent), and the balance (19 per cent) by reduction of liquid assets. See *Survey of Current Business*, March, 1948.

[22] Reports of the F.D.I.C.

be estimated that the total assets carried on the books of non-financial corporations rose about 42 per cent between the end of 1940 and the end of 1941, whereas gross national product increased by 131 per cent between the two years.[23] Even if current assets alone are considered, in order to eliminate the distortion caused by the gross book undervaluation of fixed assets at current price-levels, current assets increased by only 86 per cent. These overall comparisons reinforce the impression—obtained from considering individual items of business assets—that American business will demand large amounts of additional funds to expand assets, if prosperous conditions continue.

Second, internal financing has played an extraordinarily important role in the financing of asset expansion, because of the high profitability of business and the relatively modest distributions of dividends. It is highly improbable that internal financing can continue on the scale of the past two years, either in absolute amount or in relative importance as a financing device. For business as a whole, profits are likely to fall markedly and dividends are not likely to fall sharply.

As productive capacity catches up with the rate of demand for steel, non-ferrous metals, building materials, and many fabricated products, competition will become more widespread and pervasive, and this will tend to reduce profits, even though general economic conditions continue to be prosperous. More important is the fact that a considerable part of the reported book profits of American business enterprises during the past two years have been, in a sense, illusory. They have rested on price inflation and will disappear when prices stop rising.

It is well recognized that prevailing accounting practices have produced an understatement of costs and an overstatement of profits amounting to billions of dollars annually, on the assumption that the present price-level does not recede. Despite some growth in last-in first-out accounting, the predominant method of determining profits is based upon (1) the charging of inventory into current operations at actual cost instead of replacement cost, and (2) the charging of the services of fixed assets into current operations at a pro rata of their original cost instead of their replace-

[23]For purposes of this estimate, the book value of fixed assets of non-financial business corporations, net of depreciation allowances, were placed at $100.3 billions at the end of 1940 and at $112.0 billions at the end of 1947. Current assets were respectively $60.3 and $112.0 billions according to S.E.C. estimate.

ment cost. Consequently, in an era of price inflation, business statements reflect profits based upon a much lower level of costs than prevails currently. In effect, business has been selling out piecemeal its low-cost productiveassets and taking the "profits" into operating income. For 1946 the Machinery and Allied Products Institute has calculated that the statements of business corporations included about $1.5 billions of profits on inventory due entirely to advances in prices, and another $1 billion of profits due to understatement of depreciation of fixed assets. For 1947 the figures are even larger. The Department of Commerce has stated: "Had it been the universal practice to charge to expense the amounts needed to replace the physical amounts of inventory used up in production rather than their money value, corporate profits in 1947 would have been six billion dollars lower."[24] Add to this overstatement of profits that which arose out of inadequate accounting for exhaustion of fixed assets of, perhaps, $2 billions during 1947, and there emerges a total profit overstatement of $8 billion. This represents more than 25 per cent of the reported profits *before* federal taxes of all American corporations.[25]

As regards distribution of dividends, it would appear likely that business will not sharply reduce present disbursements even if profits decline, because shareholders are becoming more persistent in their demands for a larger share of business profits to meet their rising living costs. In addition, business management will find that more liberal dividend policies will promote the sale of new issues of securities on favorable terms.

All things considered, it would appear that *undistributed* corporate profits could decline during the next few years from their present level of $10 billions per annum to a level of perhaps $4 to $5 billions, even assuming a continuance of general economic prosperity and present price levels. Internal funds are therefore likely to provide a much smaller share of the funds needed to expand business assets than is now the case.

[24] *Survey of Current Business*, February, 1948, p. 7.

[25] It would appear timely for the accounting profession to re-examine its conventions and practices in the light of sharp changes in price-levels. It is paradoxical, to say the least, that a business with heavy investment in fixed assets can, under current accounting practices, be unable to continue in existence although it reports a net income consistently. The subject is too large for examination here, but it is of great importance in the behavior of business managers, owners, and organizations of workers, and for overall economic stability.

Third, a final significant generalization is that the ratio of equity to debt has increased substantially in American business as a whole. The proportion of net worth to indebtedness rose materially as a result of the retirement of long-term bonds and notes and the increase in net worth out of retained earnings. In 1940 about 62 per cent of the total assets of non-financial business corporations represented equity and 38 per cent represented debt. For forty years prior to World War II this ratio displayed no marked secular trend. At the end of 1947 it is estimated that equity had risen to 67 per cent and debt had fallen to 33 per cent of the total assets of business. It is fair to infer that the borrowing power of American business is at present much higher than it has been for many years. The credit-worthiness of business will be good for some time to come.

V. Future Demands for Funds by Business Enterprises

The principal difficulties encountered in projecting demands for funds by American businesses during the next six or seven years lie in the assumptions to be made about the volume of production and employment, the price-level, and gross national production. These factors are all important, particularly price-levels. Other considerations, such as the physical condition of plant, the rate of invention, business taxation, etc, are relevant but subordinate in their significance.

For the purpose of setting a framework for projecting business demands for funds, the following assumptions are made arbitrarily about the economic characteristics of the next six or seven years. They rest on the view (unorthodox today!) that relatively high employment and reasonable price stability in the American economy during the next half-dozen years is a *reasonable probability* in view of changed underlying economic conditions and recent improvements in the apparatus of economic stabilization. These fortunate circumstances are not, of course, vouchsafed to us. No attempt is made here to defend these assumptions exhaustively as against alternatives. The assumptions pertain to the *average* behavior of the period; they admit the occurrence of cyclical fluctuations during the period. It is assumed:

First, that the United States will not be engaged in a long war; that there will be a growing sense of international political stability; but that this country will continue to support a large and costly military establishment.

Second, that Britain and western Europe will gradually recover their economic equilibrium with American co-operation; that present loans and gifts by the Economic Cooperation Administration will later be succeeded by foreign loans and direct investments; and that the United States will continue to have a large annual export surplus.

Third, that American consumers will display a high propensity to consume, partly because of strong demands for goods both old and new, partly because of a more equalitarian distribution of income, and partly because of large holdings of liquid assets; and that construction will proceed at a high rate.

Fourth, that domestic price levels—both wholesale and retail—will tend to level off and to fluctuate within a range of about 10 per cent of their current levels. This would be consistent with a considerably larger fall in some categories of prices, notably farm products, foods, and textiles, accompanied by a lesser fall or a rise in other prices, such as rents and durable goods.[26]

[26]Because of its critical importance, and because it runs counter to post-World War I experience and to the expectations of many thoughtful persons, a brief explanation should be made about the asssumption regarding price-level behavior. It rests on a view that basic institutional changes have taken place in the American economy that facilitate increases in prices and that resist decline. Reference is made especially to the emergence of powerful labor organizations with aggressive wage-raising policies, and to the potent agricultural bloc with its "parity-price" formula and farm price support program.

Generally speaking, farm, food, and textile prices are competitively determined (in the traditional sense), and during the recent boom they have been the bell-wether of inflation, rising rapidly in the face of strong demand. Prices of most industrial products (the so-called "administered" prices) have trailed other prices, and have risen in response to the higher costs created by wage increases rather than in response to active demand.

Since 1940 average hourly earnings in American manufacturing industry have just about doubled. On a generous estimate, productivity in manufacturing has risen by no more than 20 per cent. Hence wage costs per unit of product have risen by at least 75 per cent on the average. This may be taken as a rough measure of the amount of price inflation that has become embedded in the structure of industrial prices.

Assuming that powerful labor unions will resist successfully cuts in hourly wage rates, in the face of declining demand and developing unemployment, the range of decline in industrial prices during a general business recession is small. So long as farm prices are tied to industrial prices by the "parity" formula, they, too, cannot decline greatly. In a recession, therefore, industrial prices will tend to hold up the price-*level*—because of the dynamic element of wage costs—just as they have so far restrained the advance in the price-level during the postwar period.

Somewhat less confidence is placed in the assumption made about the upper boundary of price-level change. Essentially, it rests on the hope that productivity will rise rather rapidly in the future, that labor unions will pursue an enlightened wage policy, and that federal fiscal-monetary policies will be restrictive of further increases in total demand and cost of living.

On these assumptions it would follow that physical volume of production would tend to grow annually above present levels, in reflection of increased population, work force, and productivity. Gross national product would rise commensurately, in view of the assumption of relatively stable prices. The total assets of American business enterprises would also show a substantial average annual growth during the years 1948-1955. Focussing the estimate of the amount of this growth on non-financial business corporations, the amount might be projected roughly as follows:

In fixed assets, an average annual increase of	$6-8 billions
In inventories, an average annual increase of	2-3 billions
In cash and equivalent, an average annual increase of	1-2 billions
In notes and accounts receivable, an average annual increase of	2-3 billions
In total assets, an average annual increase of	$11-$16 billions

These estimates do not rest on an elaborate statistical technique, which would be unproductive in this context, but on an inspection of the curves of growth of business assets in the light of the basic assumptions that have been made regarding the future.

VI. The Future Supply of Funds to Business Enterprises

We may next consider the ways in which the funds required for asset expansion might be supplied. At an earlier point reasons were given for the view that the annual internal supply of funds from retained earnings will diminish sharply from current levels. The opinion was ventured that the supply of funds from this source would average about $4 billion dollars per annum for non-financial corporations. This would leave a lower limit of $7 billions and an upper limit of $12 billions to the estimated range of funds to be provided annually from external sources. During 1946 the *increase* in outstanding commercial loans of banks plus the amount of corporate securities issued for new money amounted to about $8.1 billions; during 1947 the amount was $8.7 billions. Consequently, the estimate suggests a conclusion that the lower limit of the range of external financing would involve resort to the market on a scale only slightly less than during the past two years; whereas the upper limit to the range would entail a very large increase in demands for external funds over those exercised during the past two years.

An interesting question pertains to the probable roles of the commercial banks and of the new issue market for corporate securities as suppliers of funds. During 1947 new money corporate issues

exceeded the increase in outstanding commercial loans for the first time since 1942. Whether or not this relation will continue will depend mainly upon price trends in the bond and stock markets and upon the impact of federal monetary-fiscal policy on commercial bank lending power. The basic assumptions stated previously imply economic conditions that could support buoyant prices for equity and risk-bearing debt securities of business corporations, and which would promote an expansion in the flotation of new issues. They also imply continued inflationary pressures on prices. As long as these continue, federal policy will seek to restrain commercial bank lending activity, and to make the bank credit less readily available and more costly. On these considerations, it is a plausible conclusion that the new issue markets will probably continue to provide proportionately a larger share of the funds secured by business from external sources.

Another question concerns the proportions of the externally supplied funds that are likely to take the form of equity and of credit. Here again, the answer will depend heavily upon the behavior of stock prices, upon federal fiscal-monetary policy, and also upon the nature of changes in personal and corporate income tax laws. Assuming some reduction in rates, but no radical change in structure, tax laws would continue to make the issuance of debt securities attractive because of the deductibility of interest from taxable income of busines enterprises. When this factor is coupled with the relatively large margin of equity in business a large annual increase in the amount of business debt will probably be incurred. Equity issues will probably also expand in volume, particularly at times when stock prices are buoyant. It is clear that at some stage in the process of expansion of business assets, equity funds will have to be supplied in the ratio of about $2.00 of equity for each $1.00 of debt in order to maintain the traditional ratio between debt and equity.

VII. The Future Cost of Funds to Business Enterprises

Any projection of the cost of funds to business involves assumptions regarding federal fiscal-monetary policy as well as the basic factors mentioned previously. For present purposes it has been arbitrarily assumed that prevalent fiscal-monetary policies during the next six or seven years will *not* be inflationary with respect to the supply of money and credit. This implies continued heavy personal and corporate income taxation; a tendency to balance the

federal budget on consolidated cash account; some further retirement of governmental securities held by the Federal Reserve banks; and some further increase in those held by non-bank investors. It also implies actions by the federal monetary authorities to curb, if not to prevent, further increases in bank credit. Such policies, it is to be repeated, are assumed to be followed during *most* of the period under scrutiny, for business recessions are likely to appear that will call for temporary reversals of these policies.

If it may be assumed that, on the average, federal fiscal-monetary action does not inflate the supply of money and credit, then the external financing of expansion in business assets, as well as of other forms of net capital formation by consumers and government, will need to be financed by savings out of current income. How will the aggregate supply of such savings compare with the aggregate demand for them? The answer to this question may only be given tentatively, in the absence of a thorough exploration of the complex issues that are involved. The tentative answer implied in preceding discussion is that there is a greater likelihood of a shortage of savings with respect to the desired amount of investment rather than of a shortage of investment outlets for the desired amount of savings. If this proved to be the case, there would tend to be recurring upward pressures on the price structure that would cause federal authorities to take fiscal-monetary actions of a deflationary character. The outcome of such a situation would inevitably be a persistent tendency for interest rates to rise. Such a rise, in fact, has been long overdue. It would have already occurred in larger measure, had the federal government seen fit to utilize really effective monetary policies to curb price inflation.

Even on the asumption that government balances its revenue and expenditure (on consolidated cash account), the balance is likely to be at a *high* level of revenues and expenditures. The federal government is likely to spend large sums, not only for current governmental services, but also to finance public works and gifts and loans to foreign countries on a great scale. It will probably continue to appropriate through taxation a large share of current income payments to pay the bills. Continued relatively heavy taxation would serve to reduce sharply the amount of savings made by persons in the income brackets from $10,000 and upward, who have accounted for a large share of personal savings in the past. For this and other reasons the ratio of savings to total income may

be smaller than it was in prewar years, despite the large rise in real as well as in money incomes.

On the other hand, the demand for investible funds for purposes of private capital formation by agencies other than the federal government is likely to be high for some years to come. Residential construction, for example, could readily absorb $6 billions of funds annually. It has been pointed out previously that the average annual increase in the total assets of business might well be from $11 to $16 billions per annum. It is not unlikely that agriculture, and state and local governments, will also absorb savings in increasing amounts, as their postwar programs of construction and provision of fixed facilities get under way.[27] At least, the burden of proof appears to be borne by those who hold that the savings will be in ample supply and that money rates will be easy during the next six or seven years.

VIII. Summary

Several broad conclusions may be drawn from the preceding discussion of interest to institutional investors and other suppliers of funds to business enterprises.

First, during the next six or seven years, business will probably demand large amounts of funds annually from external sources to finance expansion in assets. Life insurance companies and savings institutions are likely to have broadening outlets in business for the investment of their funds.

Second, funds probably will be supplied on both an equity and a credit basis, and the amounts of new money obtained on *both* bases are likely to be larger than they have been in any previous period.

Third, open market financing of business enterprises is likely to gain in relative importance to direct financing. But term lending

[27] If the announced plans of different non-federal agencies of capital formation are to be given credence, it is not difficult to foresee a high volume of investment outlays. For example the electrical utility industry has planned a 40 per cent increase in generating capacity during the five-year period 1947-51 to cost $7 to $8 billions. (See *The Pulse Beat of Industry,* McGraw-Hill Book Company, January, 1948, p. 24). The continuing inventory of proposed heavy engineering construction—public and private—maintained by *Engineering News Record* showed a backlog conservatively estimated at $45 billions at the close of 1947. (*Ibid,* p. 18). Because "heavy engineering construction" accounted for only $5.5 billions of a total of $12 billions of construction of all kinds started in 1947, it is apparent: (1) that the backlog of planned *total* construction must be very much larger than $45 billions, (2) that the execution of planned "heavy engineering construction" *at the 1947 rate and price level* would require more than eight years.

and the private placement of securities will be utilized more extensively, and in these operations the life insurance companies are likely to gain a larger position compared with the commercial banks, which will probably be under pressure to reduce risks and to curtail their loans.

Fourth, both the average rate of return from business investments, and the level of investment risks, will probably be comparatively high. If this be true, greater skill will be required in the selection of investments than has been necessary during recent years, and the premium paid for such skill in the form of investment income will be ample.

COMMON STOCKS AS INVESTMENTS FOR AMERICAN LIFE INSURANCE COMPANIES, A NON-ACADEMIC VIEW II*

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IV. The Suitability of Common Stocks as Investments for Life Insurance Funds

What then is the suitability of common stocks as an additional outlet for policy reserve funds? With current yields on common stocks now running over 5 per cent, backed up by earnings-price ratios of almost 12 per cent, compared to yields in debt securities running 3-4 per cent, investments now in this field, on a yield basis, look very attractive. The underlying issue is: are common stocks undervalued compared with other investment outlets? And two other questions are involved: Will common stocks subject the investor to as large capital loss hazards as they have in the past? And what will be the impact on common stock values if long-term interest rates do rise?

There are two views to this issue—an academic view and a non-academic view. Whatever view is taken, however, this is an exceptionally difficult question to discuss. In 1940, the late Buckner, the then chairman of the board of New York Life, emphatically said: "Common stocks haven't much appeal to me."[31] Recently in very guarded language, Harrison, the present chairman of the board of New York Life, made a plea that life companies seriously weigh the pros and cons of equity financing.[32] When Parkinson, directing head of Equitable Life, heard about Harrison's guarded suggestion that common stocks may be suitable as investments for policy reserve funds, he is reported to have said that it "definitely did not meet with his approval."[33] In short, many investment officers of life companies are not even now ready to consider the possibility of investing large sums in common stocks. Psychologically, to say the least, practical life insurance heads shy away from common stocks.

*The first instalment of this article appeared in the October, 1948, number of this journal, pp. 39-51.

[31] *Study of Legal Reserve Life Insurance Companies* (T.N.E.C. Mono. No. 28), Washington, 1941.

[32] George L. Harrison, "Some Observations on Equity Financing," speech before the New York chapter, American Society of Chartered Life Underwriters, April 18, 1948.

[33] *Finance*, April 30, 1948.

In 1931 the writer presented a paper before the American Economic Association on the subject "Should Life Companies Be Permitted To Buy Common Stocks?"[34] He then suggested it might be advisable to permit life companies to invest up to 15 per cent of their admitted assets in common stock investmens. Whereupon all life companies disinvested in common stocks until 1936 and throughout the period 1931 to 1940 invested insignificant amounts in equity securities. And the then lenient Canadian law was even changed, reducing the amount that Canadian Life companies could invest in equity securities to 15 per cent of their admitted assets. Maybe the fears developed as a result of the 1929-32 deflation had, also, something to do with the disinvestment in common stocks and the less lenient attitude taken by Canada to such investments.

As I look back to my study in 1931, it is clear that the point of view taken there was academic. It was then argued that if investment officers of life companies could correctly forecast the future, it was obvious that they should be given complete freedom to invest in any field. But since highly accurate forecasting is impossible, it was pointed out (in full view of the limited investment outlets even then available to life companies, coupled with the underlying fact that the liquidity problem is of no consequence because annual income exceeds annual disbursements) that it would be highly desirable to give enough freedom to competent investment officers to invest up to 15 per cent of their assets in common stocks. It was also pointed out that although the obligations of a life company are dollar obligations, the beneficiaries should be protected, if at all possible, against price inflation and that therefore it behooved the directing heads of life companies to invest in those securities, namely, common stocks, that might protect invested funds from declining in real value. No mention was made of the current argument for investing in common stocks; namely, that investment operations of life companies should be directed to channels that would help stabilize the American economy at a high employment level. This is a relatively new idea. As has been already indicated, all of these suggestions fell on ears that were deaf to investing insurance funds in anything but debt securities of various kinds.

In the seventeen years since the writer suggested common stocks as suitable investments for policy reserves, he began to understand the attitude and point of view of investment officers of life companies. Indeed, his experience during this period in liquidating a

[34] See *The Journal of Business of the University of Chicago*, April 1932, p. 173.

relatively small life company made him very sympathetic to the non-academic view of investment officers that abhors common stocks as permanent investments.

It is one thing to sound off in academic generalities regarding common stocks as investments; it is quite another thing to have the actual job of investing in common stocks without being subjected to the risk of serious capital losses. The one simple fact that probably will never be proved wrong is the fact that the market values of common stocks fluctuate and they may fluctuate violently. And the other fact is that it is exceptionally easy to buy either the "wrong" stocks or the "right" stocks at the wrong time.

Under these circumstances, when a life insurance officer has the problem of actually investing life insurance trust funds, indeed sacred trust funds, and his obligations are dollar obligations, he is very likely to take the practical point of view of a loaning officer of a bank even though his liquidity problem is insignificant and he is investing long-term instead of short-term personal savings. Furthermore, it must be borne in mind that the position of a life insurance investment officer is a difficult one. He has the job of investing funds in specific securities made available by the capital markets and his problem is not solved until he makes specific selections. Accordingly, he is almost forced to scrutinize each investment opportunity as if a loan is being contemplated and, indeed, when either mortgage loans or direct loans to business are made, just this point of view of necessity is implemented.

It follows from this non-academic approach that mortgage loans and other private debt securities are preferable to common stocks and other equity securities from the standpoint of an investment officer solving the day-to-day problem of investing insurance funds. The future with regard to the rate of return and dollar value of debt securities can be judged with a great deal more confidence than that of equity securities. In short, the visibility is always much greater for debt securities than it is for equity securities. Debt securities often have periodic prepayments as well as definite maturity dates. Thus the amount outstanding in each specific investment is continously being reduced as the maturity date approaches. Usually, too, various safety factors are inserted in the loan arrangement, such as sinking fund requirements and restrictions on other borrowings by the debtor. And, finally, although the fluctuations in the market value of bonds and other debt

securities are significant they are by no means as great as the fluctuations of prices in the common stock market, especially if debt securities are held to maturity. In short, the future regarding debt securities is more knowable than it is for equity securities, and the risk of serious capital depreciation is correspondingly less.

No matter what "slide-rule" method or formula is applied to solving the problem of investing in common stocks, it must always be remembered that investment in common stocks involves more forecasting than is necessary when investing in debt securities are made. And from the standpoint of specific selection of equity securities, it must also be borne in mind that buying common stocks, also, involves the investment officers in adverse repercussions arising out of the following:

1. Investing in common stocks is largely an impersonal matter and usually does not permit the making of special arrangements such as is possible in making a specific mortgage loan.

2. Stock market prices reflect the action and reaction of the irrational behavior on the part of both buyers and sellers and the psychotic periods may be extended ones.

3. Ownership and management have been significantly divorced in the operation of the modern corporation and this has often led to operations which benefit almost entirely the management over against the common stock holders.

4. Large holdings of equity positions may result in sufficient control of the enterprises involved to raise the question of anti-trust action.

Furthermore, the point of view of policy holders regarding investments in common stocks should perhaps be taken into account. The relatively high-income buyer of life policies considers his "investment" in life policies as "gilt-edge," i.e., as safe as a United States government bond. He wants to do his own investing in risk securities, such as common stocks. And in this connection, it may be noted that between 1940 and 1947 people actually reduced their holdings of corporate stocks and bonds by nearly a billion dollars at the same time that they put away well over $100 billions in cash, bank deposits, and government bonds.[35] Apparently they, too, as individual investors, have so far been shying away from common stocks since the 1929-32 deflation.

[35] *Federal Reserve Bulletin*, June, 1948.

On the other hand, from the social interest point of view, it has been emphatically urged that life companies should invest in common stocks to help stabilize the American economy at a high employment level by making available a broad market for equity securities. Corporations appear now to be desperately in need of a broad equity market to finance the improvement and expansion of our American productive machine. The managements of corporations need more risk capital and less debt capital, recognizing full well that when things go wrong, debts help create a cumulative downward spiral. Furthermore, under existing conditions in capital markets, additional debt capital can be raised only when an enlarged equity base is available to support the debt.

It follows that the suitability of common stocks as investments for life companies is not easy to discuss. With few exceptions, the practical men are still, at least psychologically, against investment of life insurance reserve funds on a large scale in common stocks.

Let us inquire then what would have happened to life companies if they had invested in common stocks in the past. And then we shall raise the issue, in full view of the changed facts confronting life companies, whether or not an investment policy calling for substantial investments in common stocks is now justified.

Suppose the life companies had followed the writer's suggestion in December, 1931, and had then invested in industrial common stocks. The Dow-Jones Industrial Average was then around 75; it is now about 190.[36] It is clear that they would have had a capital appreciation by now of considerably over 100 per cent if they had invested in the averages. But some time in 1932, they would have had to bear a capital loss of around 50 per cent on the common stock investment. Even though common stock prices had fallen by the end of 1931 to about one-fifth of the extraordinarily high levels reached in 1929, the risk of capital loss of investing in this field in 1931 was very great.

The impact of a 50 per cent loss in 1932 on the then surplus of life companies, coupled with the growing cash demands of policy holders, would have made for an exceedingly difficult financial situation and, perhaps, technical insolvency. Even the adoption of some sort of convention values instead of market values on common stocks would not have alleviated the resulting financial difficulties,

[36]This was written early in June, 1948.

provided the amount invested in common stocks in 1931 was substantial, say around 15 per cent of the admitted assets.

Let us now consider briefly the testing of the suitability of common stocks for life insurance companies provided investment officers make use of some sort of "formula plan" as a scheme for reducing the risk of capital losses. Testing the suitability of common stocks as investments for life companies when such a method of investing is applied should take cognizance of the fact that formula plans usually rest on the assumption that stock prices fluctuate largely within the limits of a certain range and, therefore, common stocks should be sold as the upper limit of the range is reached and repurchased as the lower limit of the range is reached. This sort of method of investing in common stocks has merit. It is based, however, on a forecast of the consistency of common stock price fluctuations, because it is a plan of investing which presumably "forces" the following action:

1. The gradual purchase of common stocks as "historically low" levels are being reached in the stock market.

2. The retention of common stock holdings until levels historically above "normal" have been reached.

3. The gradual sale of common stocks as "historically high" levels are being reached in the stock market.

In short, given a predetermined range of fluctuation in stock prices, such a method tends to eliminate optimism at high common stock price-levels and pessimism at low common stock price levels by automatic action at specific predetermined stock market levels. Formula plans, therefore, are a way of minimizing the risk of capital losses.

As an illustration, suppose a formula plan was applied to investing in common stocks, let us say, at the beginnig of 1932, when stock prices definitely appeared to be at a "historically low" level; and at that time 25 per cent of the admitted assets were invested in a broad list of common stocks. How serious would the capital losses have been? Between January 1, 1932, and December 31, 1932, the Dow-Jones averages declined significantly, industrials and rails over 19 per cent and utilities more than 10 per cent. The result, then, would have been a very serious capital loss, a loss that would have threatened the solvency of a life company whose surplus was in the neighborhood of 5 per cent of admitted assets.

From 1933 on, if the percentage of total admitted assets invested in common stocks remained the same, i.e., 25 per cent of admitted assets, for several years, was reduced in 1936 and 1937, increased in 1938, reduced again in 1939 and increased from 1940 on, capital losses would have been reduced as compared to the maintaining of the common stock investment constantly at 25 per cent of admitted assets throughout the period. Capital losses, on the basis of market value, probably would have been experienced in 1934, 1937, 1940, and 1941. In the last three years, however, the capital appreciation based on market values would have probably more than offset the capital losses shown on a cost or market valuation, whichever is lower.

It is clear, then, that investing by some sort of formula plan in all probability cannot completely eliminate the risk of capital losses. The application of such a plan, however, may minimize capital losses and therefore should be considered in dealing with the issue of whether or not common stocks are suitable as investments for policy reserves.

It is important to note, also, that investing in common stocks by a formula plan does not *directly* take account of yields and yield differentials arising out of the shifting demands for various kinds of securities in capital markets. On this basis alone, it may not be considered as an effective practical approach to the investment problems of life companies. Life companies are in a position to take advantage of shifting demands in capital markets because they have no liquidation problem.

Let us then take the position that common stocks may be suitable as investments for reserve funds of life companies under certain conditions in capital markets and not under other conditions. Furthermore, the suitability of common stocks as investments for life companies is not merely a question of whether or not common stock prices are historically at "low levels" or at "high levels." The essential issue from the standpoint of the investment officers of life companies is whether the current yields on common stocks are sufficiently above the yields on other available outlets for insurance funds to permit the amortization of a significant portion of the investment made in common stocks over a period of time. Yield differentials must cover the risks involved in investing in securities such as common stocks whose prices may fluctuate violently. And these yield differentials should be used (at least in part) to amortize the value of the investment in common stocks

and thus create special valuation reserves against possible capital losses.

On this basis, an over-all picture of the capital markets between 1919 and 1948 indicates that the position taken by investment officers during the period 1919 to 1935, of not being very much interested in common stocks in solving their current investment problem on the surface appears to have been generally correct. Throughout this period, the current yields on a broad list of common stocks were below the current yields on a broad list of corporate bonds, and corporate bonds were in adequate supply during most of this period, especially in the 20's.

Since 1936, however, the yields on common stocks have been consistently above the yields on corporate bonds, and since 1933 new domestic corporate bonds and notes have not been in adequate supply. This situation, coupled with the other factors mentioned, indicates why investment officers are perhaps now seriously interested in common stocks as an additional outlet for life insurance funds.

The general picture indicating that common stocks as compared with other investment outlets have been in an exceptionally favorable position since 1936 is not enough, however, to evoke a plan of action regarding investments in common stocks by life companies. Accordingly, let us apply an "amortization test" regarding the suitability of common stocks as investments for policy reserves covering a twenty-five-year period, 1923 to 1947.

Since United States long-term bonds may well be the present alternative to common stocks, let us assume this was the situation twenty-five years ago (it of course was not) and select a group of 15 stocks yielding, as a group, approximately 6.3 per cent in 1923, on the basis of 1922 dividend payments, so that the yield differential between these stocks and the yield of 4.3 per cent on United States government bonds in 1923—the year in which these stocks are to be purchased—would be sufficient to amortize 50 per cent of the investment in common stocks made in 1923 by the end of 1947. This would be at the simple rate of 2 per cent per year, assuming the differential was not on the average reduced. This 50 per cent amortization plan by the end of twenty-five years was chosen on the assumption that a common stock investmen should be amortized as rapidly as an ordinary real estate investment to take account of the risk of capital loss.

In selecting the common stocks, an attempt was made to select those stocks investment life officers would have probably chosen in 1923. Otherwise, a definite attempt was made to avoid a bias in favor of common stocks that we now know have turned out very well. Within these limits, the selection was restricted to those stocks that were given an A or better rating by Moody and had at least a five-year record of dividend payments prior to 1923. The other restriction was that the group as a whole should yield in 1923, on the basis of the 1922 dividend payments, approximately 6.3 per cent and each individual stock should yield no less than 5.3 per cent.

The annual yield of all the fifteen common stocks on the 1923 purchase price turned out exceptionally well during the entire twenty-five-year period, perhaps better than it will for any twenty-five-year period in the future. The number of extra dividends, split-ups, etc., during the 20's was extraordinarily large. For the entire twenty-five-year period, the range was between 5.92 per cent and 12.21 per cent and the annual average 9.13 per cent, much more than twice the 1923 yield on long-term United States government bonds.

Every year, except in 1923 and in 1933, at least 2 per cent of the investment in common stocks in 1923 could have been amortized with the effective annual yield of 4.3 per cent remaining. In all but five of the years, more than 3 per cent could have been used for amortization.

This test of the suitability of common stocks shows clearly that on a yield basis, with a considerable margin to spare, common stocks purchased as permanent investments in 1923 would have been an exceptionally favorable outlet, as compared to long-term United States government bonds, for the funds of life companies over the entire twenty-five-year period, 1923 to 1947. None of the other investment outlets in 1923 would have yielded as high earnings over this same period and many would have afforded a yield well below 6 per cent, or less than two-thirds of the annual yield obtained on the fifteen common stocks selected in 1923.

Had investment officers amortized the value of the common stock investment made in 1923 to the full extent of the yield differential between the common stocks selected and long-term United States government bonds, by the end of 1947 the common stocks would have been on the books of life companies at a nominal value. Even

by 1932, the value of the investment in common stocks would have been reduced by more than 50 per cent of its 1923 value.

But more precisely, what about the risk of capital losses? No significant capital losses would have occurred until around 1931. At the low in 1932, the 1923 investment in common stocks, before amortization, would have depreciated approximately 43 per cent. Had the investment been amortized at a 2 per cent simple interest rate so that by the end of 1947 50 per cent would have been written off, in 1932 the book capital loss on the basis of market values would have been significant, slightly below 30 per cent. But, if the entire difference between the annual yields on the 1923 common stock investment and the 1923 yield on long-term United States government bonds had been utilized year by year for amortization, the 1923 common stock investment would have been written down by over 50 per cent. Since the capital depreciation at the low of 1932 was 43 per cent, no capital loss at all would have been shown on the books.

Nevertheless, it should be noted that the fluctuations in the market value of this 1923 investment in common stocks were exceptionally great. At the high in 1929, the appreciation was over 350 per cent and at the low in 1932 the depreciation was 43 per cent. Since 1932, at the highs and lows, the market value fluctuated between an appreciation over the 1923 value of 31 per cent at the low of 1942, to 211 per cent at the high in 1946. But it should also be noted that, at the low of 1948, the appreciation was approximately 127 per cent.[37]

The test of the suitability of common stocks shows that on a capital loss basis, without a plan for amortization, common stocks, purchased as permanent investments in 1923, were not a favorable outlet for the funds of life companies over the entire twenty-five-year period, 1923 to 1947. In the early 30's, without an amortization plan, exceptionally heavy capital losses would have been incurred on the basis of market values. Even with a plan for amortizing 50 per cent of the 1923 investment over a twenty-five-year period, an exceptionally large capital loss would have been incurred in the early 30's on the basis of market values, even after allowance for amortization. The impact of these capital losses on the surplus account of life companies would have been so severe that, if market values were used as a basis for valuation and the investments in common stocks were in the neighborhood of, say, 15 per cent of

[37]This was written in June, 1948.

the total admitted assets, the surplus of life companies would have been almost wiped out. Indeed, technical insolvency would have been threatened.

If, however, the entire differential between the annual yields on the 1923 investment in common stocks and the yield on long-term United States government bonds was utilized for amortization, then no capital loss would have been shown on the books in the early 30's. The contingency valuation reserve would have been larger than the reduction in the market value of this group of common stocks. But it can be easily argued that this large differential in yields was extraordinary and could not have been foreseen back in 1923.

What then does this "50 per cent-amortization-over-a-25-year-period-plan" of investing in common stocks in 1923 show regarding common stocks as investments for life companies?

First, it shows that on a yield basis, United States government bonds compared to common stocks were overvalued as permanent investments in the capital markets during the twenty-five-year period. Accordingly, life companies without a liquidity problem could have taken advantage of this condition in the capital markets during this period, provided some way could have been found to carry common stocks on some other basis than market values. It should be noted here that an amortization plan that would have permitted writing off the value of the original investment by the full differential between the then yield on long-term United States government bonds and the yield on the common stock investment made in 1923 would have solved the valuation problem, because then no capital loss, even on market values, would have been shown in the early 30's.

The plan of action on the basis of this test would be that on a yield basis life companies should invest in common stocks only when the differential between the yield on common stocks and the alternative debt securities was sufficient to make possible at least a 50 per cent amortization of the investment in common stocks over a twenty-five-year period, to take account of the risk involved in investing in common stocks over against debt securities. This means that during the periods when the yields on debt securities are more than the yields on common stocks, no investment in common stocks should be made. This was definitely the case, with a large margin, in 1920, 1928 to 1930, and 1933-34. It, of course, also

means that the differential in yields must be significantly in favor of equity securities, as it was in 1940 and 1944 and 1946-47, to make possible such an amortization plan.

Second, the "50-per-cent-amortization-over-a-25-year-period-plan" of investing in common stocks in 1923 shows that risk of capital losses based on market values may be exceptionally difficult to bear, if a substantial portion of the policy reserve funds is invested in common stocks. One can argue, of course, that we shall never again experience either the rise in stock prices that occurred between 1926 and 1929 or the fall between 1929 and 1932. Under these circumstances an amortization plan, even without extraordinarily high yields on common stocks, might well take care of the "capital loss" problem without changing the market valuation basis. As added protection, however, some sort of convention values, other than the market values, may well be worked out, such as the one recently suggested for the valuation of preferred stocks.[38] This test also shows that on a capital loss basis, investment officers of life companies should consider permanent investments in common stocks only as an additional outlet for their funds. Perhaps they should be permitted to invest in common stocks only a relatively small proportion of their admitted assets, a proportion small enough, however, so that a reduction of 20 per cent in market value of the investment in common stocks will only result in a 1 per cent reduction in their surplus. Under these circumstances, life companies would be permitted to invest in stocks about as large a proportion as they actually did invest in preferred and common stocks prior to 1906. Investments in common stocks could be made on a much less limited basis, if legislatures are willing to adopt some valuation other than market. It should always be borne in mind that, in the case of investments in common stocks, capital depreciation is the great enemy of life insurance companies.

But now let us assume that the differential in yields on common stocks as compared to long-term United States government bonds is used as a basis not only for investing in common stocks, but also as a basis for disinvesting in common stocks. If this plan had been used, sometime before 1929, when the yield on long-term United States governments was around 3.6 per cent and the current yield on the fifteen stocks purchased in 1923 was 2.97 per cent, all the common stocks purchased in 1923 would have been sold. The

[38] See "*A Proposed Method for the Valuation of Preferred Stocks Held by Life Insurance Companies*" prepared by a sub-committee of the Life Insurance Investment Research Committee of the American Life Convention and the Life Insurance Association of America.

average annual yield between 1923 and 1928 would have been over 8 per cent and the capital gain would have been over 300 per cent. Then, following this plan, no attempt would have been made to reinvest in the fifteen common stocks until the early 30's, probably not until 1932, when the margin in favor of common stock yields was again substantial. By the beginning of 1937, all the common stocks would have again been liquidated. In spite of the fact that the yield of United States governments had then gone below 3 per cent, the differential in favor of the common stocks would not have been sufficient. On this differential yield basis, common stocks would have been rebought in 1942 and resold early in 1946. In 1947 common stocks would again have been rebought. At the present time, of course, the investment in common stocks would be retained. If however, the long-term interest rate were to rise without a corresponding increase in dividend yields, then some thought would be given to disinvesting entirely in common stocks. Under these circumstances, private debt securities may then be in adequate supply to satisfy the demands of life insurance companies.

In short, if some plan such as the above, of timing investment and disinvestment in common stocks on a yield differential basis—the difference between yields on common stocks as compared with the yield on an alternative investment outlet—were used, the risk of capital loss would be greatly reduced. Should a scheme of amortizing be followed with this plan, then in all probability no capital losses at all would appear on the books. The contingency valuation reserves could easily take care of the declines in market values.

The basic difficulty with this test of the suitability of common stocks as investments for life companies, as with all other tests, is that economic history does not necessarily repeat itself. The least this test shows, however, is that on a yield basis common stocks are likely to be suitable investments, if they are purchased when capital market conditions exist such as those prevailing in 1947. But, on a capital loss basis without an amortization plan, they may not be satisfactory investments for a significant portion of the funds of life companies. If the general rule is followed, however, of investing in common stocks only when there is a substantial yield differential in their favor, and then amortizing the investment in common stocks at a rate equal to, or, let us say, three-quarters of the entire yield differential, the capital losses shown on the books will be considerably reduced. Under this plan, it is highly

probable that the risk of capital loss would doubtlessly have been well below the capital losses actually borne during the 30's as a result of life insurance investments in railroad bonds made in the 20's. Should the general rule also be followed of disinvesting in common stocks when the yield differential in their favor is reduced to around, let us say, 1 per cent, the risk of capital loss might be entirely eliminated without any amortization plan of devaluing the investment in common stocks.

Further careful investigation of this "50-per-cent-amortization-over-a-25-year-period-plan" of investing in common stocks coupled with the timing of investments and disinvestments in common stocks on a yield differential basis, perhaps will show that life companies should be permitted to buy up to, let us say, 5 per cent of their admitted assets in common stocks, provided, of course, that the insurance commissioners allow the valuation of the common stock investment on some such basis as has recently been suggested for valuing preferred stocks.

At the end of 1947, stocks owned by all life companies were approximately $1.4 billions, of which only 25 per cent, or approximately $350 millions, were in common stocks.[39] If all life companies had been permitted to invest up to 5 per cent of their admitted assets in common stocks, they could have had at the end of 1947 an investment in this outlet of approximately $2.5 billions, or about seven times as much as they actually had in common stocks at that time.

V. Summary and Conclusion

In summary, it is clear that the issues now being raised regarding the suitability of common stocks as investments for life companies are the result both of four new facts and of four relatively new ideas.

The important new and interrelated facts are these:

1. All life companies now hold approximately 39 per cent of their assets, or over $20 billions, in the form of United States government bonds yielding less than 2½ per cent, which is well below the assumed rate of interest on outstanding policies and contracts estimated to be around 2.9 per cent. Approximately three-quarters of this huge amount of Treasury bonds are long term. This means that life companies may well attempt to convert these holdings

[39] See *1947 Life Insurance Fact Book* (New York: Institute of Life Insurance).

into other securities. In 1947 they succeeded in liquidating over $1.6 billions.

2. All life companies now are confronted with the problem of currently investing at an annual rate of $4 to $5 billions, more than three-quarters of this enormous amount arising out of the annual excess of income over disbursements, the remainder arising out of amortization, maturities, and refundings.

3. The investment practices followed since 1930, coupled with the impact of declining long-term interest rates, have reduced almost to the vanishing point the margin of net investment earnings above the rate of return needed to maintain policy reserves. Almost all of the net investment earnings are now needed to cover the assumed interest on outstanding policies and contracts in spite of the recent substantial reduction in the guaranteed interest rates.

4. Between 1931 and 1945, the annual increases in the assets of life companies have outrun by a considerable margin the annual increase in private long-term debt.

The upshot of these new facts is that the investment position of life companies has changed dramatically as compared to what it was in the 20's. The current investment problem is to find annually private outlets for an amount of the order of magnitude of $4 to $5 billions, arising out of the annual excess of income over disbursements, maturities and refunding. The long-run investment problem is to reduce the present reliance on investments in long-term United States government bonds perhaps at an annual rate of at least $1 to $2 billions per year. All life companies, in 1947, solved this problem by investing in private debt to the extent of $5.2 billions, disinvesting in government bonds in the amount of $1.6 billions, and investing in media other than private debt, i.e., in stocks and real estate, approximately $.3 billions, of which preferred and common stocks represented approximately one-half, or $150 millions. The remaining funds were not invested; the cash holdings increased from around $750 millions to over $1 billion, or by approximately $250 millions, between December 31, 1946, and December 31, 1947.[40]

It is abundantly clear then that life officers must supplement investment in private debt by utilizing other private investment outlets, and common stocks as an outlet for at least around 5 per cent of admitted assets must be reconsidered. It may well be that

[40]Life Insurance Association of America Press Release, May 12, 1948.

unless life companies are willing to continue to rely heavily on investment in United States government bonds, even if the supply of private debt and real estate outlets increases substantially,[41] they may find that they will have available around $1.0 annually to invest in preferred and common stocks, if such investment media are found to be suitable. Of this amount, perhaps one-half, or around $.5 billions per year on the average, may be available for investment in common stocks.

The relatively new ideas regarding the suitability of common stocks as investments for life companies are these:

1. Common stocks as compared to high-grade bonds over a period of years tend to be undervalued in the capital markets. Our study shows, I believe without hindsight, that a selected group of fifteen common stocks purchased in 1923 would have yielded on the average over a twenty-five-year period around 9 per cent per year. Since 1936, the average dividend yield on a broad list of common stocks has exceeded Moody's corporate bond yields by a considerable margin in all but four years—1936, 1938, 1939, and 1945.

2. Methods of investing in common stocks have been recently suggested that might minimize the risk of capital loss involved in such investment, especially when they are made by institutions such as life companies that are not confronted with a liquidity problem. The application of some kind of formula plan might reduce capital losses that otherwise would be incurred by eliminating optimism when "historically high" common stock price levels are reached and pessimism when "historically low" common stock prices are reached. The use of an amortization plan, such as the one suggested, of investing and disinvesting in common stocks on the basis of yield differentials between common stocks and an alternative investment outlet, say United States government bonds, might not only reduce the risk of capital losses, but might even result in the establishment of special contingency valuation reserves that would come close to taking care of all probable downward market fluctuations in common stocks. Our study shows that during the twenty-five-year period, 1923 to 1947, a permanent investment in fifteen common stocks made in 1923 would have shown a book profit even in 1932, if the entire annual differential

[41]For an optimistic view of the future demand for funds, see Neil H. Jacoby, "The Demand for Funds by American Business Enterprises: Retrospect and Prospect," in the October, 1948, issue and this issue of this journal.

between the yield on these common stocks and the 1923 yield on United States government bonds was used to amortize the value of the common stock investment made in 1923. Furthermore, our study indicates, if the yield differentials were used in determining both investing and disinvesting in common stocks over the twenty-five-year period between 1923 and 1947, no capital losses at all would have been incurred. Indeed, in all probability large capital gains would have been made.

3. In full view of the capital market experience in the 30's with medium-grade bonds eligible for purchase and amortization by life companies, should the alternative to investment in common stocks be investment in these medium-grade bonds, the additional risk of capital loss of investing in common stocks may be relatively unimportant. Under these circumstances, a plan for valuing common stocks as permanent investments of life companies on a basis other than market value might be justifiably devised. Indeed, accountants for industrial companies are moving in the direction of valuing permanent common stock investments at cost and not at market. Consequently, the plan recently suggested for valuing preferred stocks could also be conservatively applied to valuing common stocks.

4. It may well be that, if we succeed in stabilizing our American economy, the future market fluctuations in comon stocks may not be as great as they were in the past. In that event, the danger of incurring capital losses will not be as significant an argument against investing in common stocks as it has been in the past. It should be noted that one of the arguments now being used for permitting life companies to buy common stocks is that such investments by life companies will help stabilize the economy at high employment levels. It follows, if this argument is correct, that common stocks will become suitable investments for life companies in part *because* life companies are investing in common stocks and, thus, both directly and indirectly reduce common stock market fluctuations.

From the non-academic point of view, these four new facts and four relatively new ideas do not necessarily add up to showing conclusively that under existing circumstances life companies should immediately invest substantial sums in common stocks, say 5 per cent of their admitted assets. The practical arguments against common stock investments, especially the risk of serious capital losses, remain important, although not as governing as they

were in the 20's. The facts have changed and new ideas have been developed.

If life companies are not permitted to invest a larger portion of their funds than they now do in common stocks, they may have to continue to rely heavily on investment in United States government bonds, and if they follow this course, they may find that, at least in part, the solution to their investment problem may be in the direction of (1) placing insurance policies and contracts on an even lower interest assumption than the one now being guaranteed, (2) making term and group life insurance more attractive to buyers than investment type of policies; and (3) limiting the size of individual life insurance companies. In this way, life companies as a group will be solving their investment problem by each having less funds than they otherwise would have to invest annually, and by increasing the margin of net investment earnings above the rate of return needed to maintain policy reserves by still further reducing guaranteed interest rates in their policies and contracts.

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